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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

A GROUP OF CONCERNED
OTTAWA CITIZENS

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 15, 1977



Ontario

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

A GROUP OF CONCERNED
OTTAWA CITIZENS
c/o 22 FOSTER STREET
OTTAWA, ONTARIO
K1Y 3J3

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 15, 1977

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
416/965-9286

MANULIFE CENTRE
55 BLOOR STREET WEST
ROOM 801
TORONTO, ONTARIO
M4W 1A5

No. 200

Royal Commission on the
Northern Environment

This exhibit is produced by

up of Concerned Ottawa Citizens

this 15 day of Dec 1977

A Group of Concerned
Ottawa Citizens
c/o 22 Foster Street
Ottawa, Ontario
K1Y 3J3
December 14, 1977

Mr. Justice Patrick Hartt
The Royal Commission on the
Northern Environment
Room 801
55 Bloor St. West
Toronto, Ontario
M4W 1A5

Dear Mr. Commissioner:

We wish to express our dismay that southerners have been given such little opportunity to prove our interest in the north to your Commission's preliminary hearings. We are speaking particularly of the fact that we had so little time to prepare for your hearings in the south and that southern concerns should be dealt with in two days in Toronto.

Our experience in the Ottawa area leads us to believe that many of us here would like to share our concerns and our visions about northern development with you and the Ontario government.

We recognize that the style of social and resource "development" which we choose for the north affects southerners and northerners, natives and whites equally. We believe that controlled development on a human scale which serves the interests of the people is the only sane future for all of us.

We ask you, therefore, to listen to us as we elaborate our concerns. We strongly urge you to bring your hearings south.

We further urge you to support the full environmental assessment on all pending "development" projects in the north to ensure that your commission's findings are given the consideration that such a vitally important investigation deserves.

Concerned Ottawa Citizens
(a list of signees attached)

A Group of Concerned Ottawa Citizens

Signees:

Paul King
Sebastian Moffatt
Michael Jake Brooks
Jim Davidson
Stan Moore
Charlene Jackson
Helen Dattie
Diana Rivington
Patty Dolan
Patricia O'Grady
David Taylor
Richard Harmston
Magda Seydegart
Charles Brabazon
Earl McLeod
Diane Bridges
Lynn Watkins
Debbie Simpson
Ray Arsenault
Jim MacDonald
Francois Bregha
Bradford Morse
Betty Plewes
Jackie Chernian
Brian Tomlinson
Paul Mably
Mary Jane Gomes
Yves Bled

Carol Tillman
Cheryl Parrott
Christopher Sharp
Alice Gillett
Johanna Cleyndeys
Pierrette Cote
Charlotte Rigby
Lindsay Morris
Bill Dolan
Jean-Pierre Lagace
John Mooney
Jean Christie
Daphne Bolestridge
Maggie McGovern
Murray Angus
Brian Loreto
Ian Hornby
Pat Anderson
Rick Watkins
Peter Lea
Don Whiteside
Ray Sunstrum
David Pollock
Joyce Hall
Marilyn Hindmarch
David Gallagher
Solange Lambert
George Tattrie

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

DEVELOPMENT EDUCATION CENTRE

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

DEVELOPMENT EDUCATION CENTRE
121A AVENUE ROAD
TORONTO, ONTARIO
M5R 2G3

PRESENTED AT

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416/965-9286

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55 BLOOR STREET WEST
ROOM 801
TORONTO, ONTARIO
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DEVELOPMENT EDUCATION CENTRE
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CANADA

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BRIEF TO THE COMMISSION ON THE NORTHERN ENVIROMENT

The Development Education Centre is a non-profit organization devoted to helping the Canadian public to become aware of and active in the political and economic decisions made by governments and corporations. We are especially concerned with decisions which have social and cultural effects upon our lives. We do this through research and production of books, educational materials and audio-visuals, as well as offering a library, bookstore and personal help to groups interested in these concerns. From this interest we look upon the proposed resource and industrial development in northern Ontario with great concern. We also see this commission as being a potential opportunity for the public to effectively ask some critical questions about the large scale developments and make their opinions publicly known to the government.

In the context of the development in the area of land north of the 50th parallel, we appreciate the efforts you have made to get a small, but reasonably representative voice of the people in the northern communities during these initial hearings. However we feel that the issue of development in northern Ontario also has significant impact upon those communities in southern Ontario. Therefore we feel that this commission should actively seek public participation in southern hearings.

We understand that on numerous occasions, during your visit to the northern, predominantly 'white' communities, you were told of the isolation and dependance which the people feel concerning the political, economic and social questions that directly affect their lives. I am sure that they often wondered if we in the south hear at all. We see this commission as an opportunity for groups and individuals outside government and business circles to the people of the north, to support their criticism of previous developments and to explore together alternative uses of their resources for the betterment and growth of their communities. In a very real way this commission can be an opportunity

to build unity within Ontario.

The purpose of both this commission and the Development Education Centre are similar with respect to having public participation in the process of resource and industrial development. From our experience we would support and encourage this commission to implement the following in order to facilitate this process. We feel the commission should:

- visit all northern communities at a time of the year when most native people can get to the hearings conveniently.
- provide financial resources, information, administration personnel to help groups and individuals wishing to appear before this commission.
- increase the number of southern communities which the commission will visit during the main hearings.

In order that the above and the commission as a whole have any effectiveness and credibility we strongly encourage you, Justice Hartt, to seek a moratorium on any development or agreement for development in the area of Ontario north of the 50th parallel until after your final report has been submitted and acted upon by the government. Also we feel that all other inquiries into specific projects should be indefinitely suspended until the results of this commission have been acted upon by the government.

In concluding, we would like to make a few further comments about public participation. Up to this point we have not been pleased with the commission's encouragement and support for public interest groups and individuals wishing to take part in this important process. On two occasions now, the meeting for public interest groups in Barrie, and today's hearing, the announcements have gone out giving less than two weeks notice. Further, funding possibilities for individuals and groups who want to do research and make submissions are still unclear to us. If your commission sincerely supports the public in their involvement in this commission, then we think that these simple administrative concerns should be cleared up immediately.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

INSTITUTE FOR ENVIRONMENTAL
STUDIES - UNIVERSITY OF
TORONTO

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

Institute for Environmental
Studies - University of
Toronto

PRESENTED AT

Toronto on

December 16, 1977

ROYAL COMMISSION
ON THE NORTHERN
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NOTE:

Attached to Exhibit 202 were the following:

Appendix I - Annual Report 1976-1977

Appendix II - Science for the Scattered Fisheries
of the Canadian Interior

Appendix III - Aquatic Environmental Quality:
Problems and Proposals

Appendix IV - Towards a Better Decision Making
Mechanism

They could not be reproduced for publication
but can be viewed at the Commission office
at 55 Bloor St. West.

No. 202

Royal Commission on the
Northern Environment

This exhibit is produced by

Institute for Environmental Studies

this 16 day of Dec. 1977

S. J. Hare

BRIEF TO THE ROYAL COMMISSION ON THE
NORTHERN ENVIRONMENT, ONTARIO

Submitted by Dr. F. Kenneth Hare

On behalf of the

Institute for Environmental Studies

University of Toronto

BRIEF TO THE ROYAL COMMISSION ON THE
NORTHERN ENVIRONMENT, ONTARIO

Submitted by Dr. F. Kenneth Hare
On behalf of the Institute for Environmental Studies
University of Toronto

PREAMBLE

This short, preliminary brief is being submitted at the suggestion of the Commission's staff. It will be followed later by a more comprehensive presentation. The present brief offers

- (i) Comments on the rôle of the Commission, and the way in which it should do its work; and
- (ii) A description of the Institute for Environmental Studies, and the help it might offer the Commission and its intervenors.

THE RÔLE OF THE COMMISSION
SCOPE AND METHODS OF WORK

The Institute hopes to submit more detailed comments on the rôle to be played by the Commission at a later date. At present it can only summarize the view of individual members.

The views expressed by D.R. Pimlott in a submission on November 23 have wide support among our members. In addition he adds these suggestions:

"The principal topics which the Inquiry must deal with in its preliminary report are: (1) What elements of the northern environment will be investigated and to what depth; (2) How the Inquiry will proceed, given that, in the majority of areas which it could investigate there are no protagonists proposing specific projects; (3) What the Inquiry will do to make it possible for native people and relevant organizations to appear before the Inquiry on a substantive basis.

"What elements of the environment should be investigated? I consider
that the Inquiry should develop a rationale for rating the importance of
topics which it will consider. The rating could be based on the potential
importance to the economy, on the potential impact on the environment and
on native people and whether they would be of local or general interest.
(In my opinion, such a rating scheme would probably result in the identifica-
tion of water resource development, mining and forestry, the traditional
frontier triad, as areas which warrant primary consideration by the Inquiry.)

"Processes and Approaches of the Inquiry. The establishment of 'Import-
ance Ratings' could lend itself to the development of process and approaches
which would be much more dynamic and understandable than those involved in
say the Porter Inquiry. For example, a quasi-protagonist system could be
developed for primary areas and quite formal approaches could be used in the
investigation of them.

"In this case a possible approach would be for the Inquiry to establish
contractual procedures for the examination of specific areas of development.
For Forestry, in view of the apparent withdrawal of Reed, the contractee
could be required to prepare a case for forestry development in the proposed
area. Proposals would be based on a series of, say three, options. These
could include: no development; development at an appropriate level of tech-
nology; development with contemporary mechanical equipment. The contractee
would be required to recommend and defend one of the options. His defence
would have to be based on comparative economic, environmental and socio-
cultural considerations.

"Funding and Participation of Adversaries. Funding could reasonably
be made available at three levels: (1) General funding for native participa-
tion to maintain a basic organization(s) to participate in hearings during

the life of the Inquiry; (2) Funding of organizations or individuals on the basis of specific proposals which are deemed to be relevant to the terms of reference and stated interests of the Inquiry; (3) Establishment of adversary contracts; the purpose of these contracts would be to allow for cross-examination of the 'protagonists' and for the introduction of evidence for or against specific development options. An adversary might be a native or environmental organization, or it might simply be a consulting firm which would assist the Commission Counsel with cross-examination and testify in its own right before the Inquiry.

"Finally, about the nature and location of hearings. The Berger experience suggests that the dual approach of formal/informal hearings would be a good one for the Hartt Inquiry to adopt. It is very important that people generally not be intimidated by the Inquiry and it is important that there be a place for "opinion" testimony. Secondly, I consider that it should be argued that formal hearings should be held at locations in Northwest (Thunder Bay), Northeast (Timmins) and Southern (Toronto) Ontario, and that informal hearings should be held in Southern as well as Northern Ontario. The logic of this approach can be argued on the need for the Inquiry to accept that its role in helping Ontarions to understand the complexities involved in future developments North of '60 is virtually as important as the recommendations that the Inquiry will eventually make to the Provincial Government."

A second group of suggestions has been put forward by D. Mackay:

"I participated in the Environmental Social Program (Northern Pipelines) as a research worker, and thus have some experience as to the kind of research which must be done in support of major energy projects. Likewise, I worked on the Beaufort Sea Project and am working on the subsequent Arctic Marine Oilspill Program. I am also on the Ontario Advisory Committee

on Synthetic Liquid Fuels which is examining (among other things) the potential for biomass production in Northern Ontario as an energy source. Some material was presented to the Berger Commission.

"Perhaps the most useful suggestion I can make is that Hartt develop mechanisms by which the many future complex social environmental and economic factors which are to be faced in Northern Ontario can be properly assessed and the information fed expeditiously into the decision making process. The old Oxfam saying of "give a man a fish and it feeds him for one day, but teach him to fish and it feeds him for life." Perhaps Hartt can teach us how to manage and exploit Northern Ontario with sensitivity within the framework of a modern industrial society."

Mackay has also prepared a formal paper concerning the decision making mechanisms, which we include as Appendix IV.

Some other members of the Institute have raised the entire question of the creation of employment and the encouragement of resource exploitation - often seen as hostile to environmental quality. Professor D. Strangway, Chairman of the Geology Department, is highly concerned about what he sees as the lack of incentive to industry to explore for minerals in Ontario. He writes, as regards the possible rôle of his Department in support of the Commission's work:

"I presume that our participation would likely be in connection with the need to add to our geological knowledge of northern Ontario and with the likelihood of discovering more mineral deposits. This latter is a difficult problem since Ontario has been one of the most explored areas in the world. There are probably no rock outcrops that have not been studied. Geophysical methods have been applied to much of the region and so the easily found deposits have been located. If more minerals are to be found, it appears

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that a much more intensive program is needed. This means access to methods for deeper exploration and yet much of the north is covered with electrically conductive clays which make penetration almost impossible. The targets in Ontario are decreasing rapidly and the current taxation climate and lack of incentives makes the desirability of exploring in Northern Ontario very low.

"Our people could address themselves to the likelihood of discovering massive sulphide deposits, gold deposits, iron ore, phosphates, uranium, etc. quite readily, but they will I am sure feel that much more geological, geophysical and geochemical work needs to be done. The Hartt Commission should also seek the views of organizations such as the Ontario Mining Association and the Prospectors and Developers Association to assess the incentives for exploring in Ontario.

"There is little doubt that more resources can be found. The question really from our point of view is do we have the correct geological environments in areas of cover and do we have the techniques to do this. For example the presence of greenstone belts in the very old "Superior province" seems to be of direct significance but can we localize favourable targets within these. Carbonatite intrusives occur broadly through the shield. Are these potential phosphate and precious metal sources? Industrial minerals are abundant but of course are only useful if they are needed locally for industry and/or if transportation costs are acceptable.

"Finally, I should like to point out that Ontario's coastline is the third longest of any of the provinces and some thought should be given to mapping on shore and off shore for geological structures and style in an assessment of whether there is any mineral potential.

"Any brief from us could address these points. Of course, the question of whether there should be mineral development in the north is a much broader

issue. Certainly at the present time there is very little incentive to industry to explore in Ontario and the Hartt Commission might usefully address this as well. Presumably clear stable policies to provide adequate incentives could restimulate activity in Ontario if this was considered desirable. In this connection, I point out that mining developments in general occupy only a very small surface area, occasionally estimated as less than the surface area occupied by Highway 401. Hopefully the Hartt Commission will squarely address the compromises that have to be made if the North is to have a portion of the provincial economy based on minerals."

Other issues have been raised by our members, all of which are probably familiar to the Commission already. Professor T.C. Hutchinson — possibly the most experienced member as regards the northern part of the province — calls attention to the problem of the single-industry towns, which is a good description of many Northern Ontario settlements. Such towns have an obvious cohesiveness in times of prosperity, but this is coupled with the insecurity and impermanence of non-renewable resource exploitation. The economics of such industry makes very tempting the neglect of occupational health standards and bad environmental practices. Whenever times are bad one hears pleas for exception to be made for the protective regulations that are in place. Only last week a federal cabinet minister voiced such a plea in relation to Sudbury — whose industries are among the world's leading emitters of sulphur dioxide. More generally, such single company towns, even if the property is now citizen-owned, are in a highly vulnerable state, and represent for Canada a permanent anxiety.

We are concerned with forest practices in the north, and with the adequacy of research and training in the area. The Boreal forest formation, which stretches across Northern Ontario, is a very special environment. Many of

its timber stands are in an ecologically undetermined state. Extensive areas, especially in the north, may not regenerate into useful associations if cut. There is a great need for intensified research into forest and timber ecology, forest management practices, and the training of personnel in the industry for ecologically sound practices. This is quite independent of the question of native rights to hunting, fishing and trapping within the forests.

We believe that the ecology and economics and regulation of recreation and towns in the north should be the object of scrutiny by the Commission, which should express views about the purposes and functions of provincial parks and reserves in this context. With a reduced working week probable in the large industrial cities of the south — and of Michigan in particular — pressure for recreational uses is likely to increase sharply. Obviously such pressure may have benefits, notably cash; but it may also do severe ecological damage unless regulated.

Finally we believe that the Commission should decide quickly what rôle the scientific community should play in its work.

Science can answer many questions of fact, and scientists can have useful opinions when they go beyond fact. Almost all issues that will come before the Commission will contain scientific questions. On the other hand the answers will in all cases go well beyond science, into the realms of political judgement. Scientists must hence be advisory in function, rather than the providers of pat answers to difficult problems.

We recommend -

(i) that the Commission establish immediately a Scientific Advisory Group, made up of respected senior figures from the Canadian scientific community. This Group should be the means whereby the Commission validates

its scientific information, and to whom it should turn for advice.

(ii) that the Commission consider asking for — and paying for — the help of selected scientific research agencies outside the federal and provincial services — i.e., bodies whose independence is not in question. This Institute and University is a case in point. Similar bodies exist in York and Waterloo Universities. There is considerable strength at Laurentian and Lakehead Universities. In fact some experience and expertise exists in all the Ontario universities. We suggest that the Commission tap some of this heavily underused talent.

THE INSTITUTE FOR ENVIRONMENTAL STUDIES

The Institute for Environmental Studies tries to mobilize research into environmental and resource problems. It does so mainly within the Graduate School of the University of Toronto, but it interacts freely with governmental agencies, other universities, private corporations, citizen's groups and several international organizations. The active internal staff, all cross-appointed from University Departments, numbers 14; drawn from nine disciplines. In addition there are 92 Associates or Members who take some part in the research programme. A copy of our most recent Annual Report indicates the nature of our work (attached).

The main working method is the establishment of interdisciplinary study or working groups that focus upon specific environmental issues. Each group has a coordinator, who is responsible for the progress of work. In 1977-78 the overall budget of the Institute stands at \$929,876, of which 49 per cent comes from external sources, and 51 per cent from regular University funds.

Several of these working groups are or have been concerned with Northern Ontario and its problems, and the Institute would gladly undertake fresh work in this area either for the Commission itself, or for intervenors.

The Institute's work is confined to interdisciplinary research. Its programmes usually involve faculty specialists from the social sciences and law as well as natural sciences, engineering and medicine. If the University lacks the right specialists, the Institute finds them in the community outside, and adds them to the internal teams. Graduate students are also active in each project. Every effort is made, moreover, to involve external agencies with similar problems — especially those financing the work.

Much environmental research of a more specialized sort goes on in

other divisions of the University. The Institute is usually aware of this work, and can answer enquiries about it. Divisions especially concerned include Geology, Geography, Forestry, Occupational and Environmental Health, the Institute for Policy Analysis and several Departments of the Faculty of Applied Science and Engineering.

Of the active working and study groups, those most likely to interest the Commission are those dealing with persistent substances in the environment, oil and gas, lake ecosystems, environmental perception and policy, population and resources, and environmental impact assessment. A brief description of the work of these groups follows (with emphasis on Northern Ontario). Membership of each group is listed in Appendix I.

The Persistent Substances Group (Professor T.C. Hutchinson, Coordinator).

This group deals with the environmental impact of heavy metals, acid precipitation and persistent organic substances, and is thus central to the pollution issues facing the Commission.

With the Sudbury basin and its mining and smelting activities as a central theme, this interdisciplinary group has been involved in field and laboratory work on the sources, transport, biological and chemical effects of nickel, copper and sulphates in the environment. Field work over the past five years has included a survey of the impact of SO₂ and heavy metals on soils, water and sediments and their associated biota, with special emphasis on species and population effects (toxicity, bioaccumulation, extinction, tolerance mechanisms) and ecosystem effects (species composition, bioaccumulation and biomagnification, rates of decomposition, repair of ecosystem damage).

Major projects include short and long range distribution of pollutants via the air and in a river system, including the acidification of lakes and

contamination of water surface soils and sediments, with special reference to the oligotrophic shield lakes and the incipient podzols, which are particularly sensitive to acidification and heavy metal contamination. The sources and pathways are quite complex. In addition to the movement through air and through a river system, the following interfaces have received attention: plant-soil, soil-soilwater, soilwater-ground water run off, sediment-water, water-aquatic biota.

Methods have been developed to determine the effects of pH, organic matter and other ions on the toxicity and speciation of heavy metals, the selectivity of organisms in their accumulation of and toxic response to heavy metals, the ameliorating effects of natural or added complexing agents to soils and water, the rôle of terrestrial vegetation in retaining metals in soils, and the synergistic effect of metals in combination.

More basic research has also emerged from some of the field programmes. This includes a non-dispersive atomic fluorescence detection method coupled with chromatography for multi-element speciation, the kinetics of membrane transport of metals by algae cells, and the distribution of nickel in *Daphnia magna* using a radioactive isotope of nickel.

A practical approach to re-vegetation of mine tailings in Sudbury, in the Yukon and Northwest Territories is in progress under the direction of T.C. Hutchinson. Native vegetation from the Smoking Hills (Western Arctic) which is exposed to natural fumigation of SO_2 and particulates containing heavy metals, shows great potential for large-scale re-vegetation of tailings. Field experiments have been set up using the arctic species, grasses from Sudbury, and also some agricultural species. Amendments including lime and fertilizer have been included in the treatments but the ultimate aim is to provide an economical long-term solution to stabilization and vegetation of

tailings. At present the arctic species, already adapted to the climatic regime, have shown the greatest promise.

The Oil and Gas Group (Professor D. Mackay, Coordinator)

This group has worked mainly on the environmental impact of oil and natural gas, especially in the context of the Mackenzie Valley pipeline proposals, and of drilling in the Mackenzie Delta and Beaufort Sea. It has long and detailed experience in problems raised by oil-spills, and by pipeline construction, and will be able to offer the Commission useful advice on pipeline construction proposals across Northern Ontario. The Group serves as the Secretariat for the Petroleum Analysis Working Group, Water Quality Technical Committee, International Standards Organization. Working methods include field studies in the north, and at the Institute's field centre at Baie du Doré, on Lake Huron, and laboratory experiments on the Toronto campus.

The group's field activities in the Arctic should have a direct bearing on proposed pipeline construction in Northern Ontario, especially in the forest-tundra and tundra sections of the route. This work has been in progress since 1972. An extended review is given in the Annual Report for 1976-77 (Appendix I).

Working Group on Lake Ecosystems (Professor H.A. Regier, Coordinator)

This group concerns itself with various matters relating to freshwater environments and aquatic resources, especially in Ontario. It has sufficient expertise to advise on scientific questions relating to fisheries and other aquatic resources. Professors Regier and Harvey have both worked specifically on Northern Ontario problems. Recent papers by these two workers are submitted as Appendices II and III.

Nowhere in the world are lake ecosystems being studied as comprehensively, extensively and intensively as in Ontario. Ten or more groups of experts can be identified in several government agencies, private consulting firms and various universities. Different groups take different approaches. Methodologically the emphasis varies: field experimentation, statistical comparisons, case history descriptions, analysis of system processes, laboratory and computer simulations, empirical intervention and experimental management, impact assessment, etc. Also the focus of emphasis varies, frequently relating to a particular simple stress such as sewage loading, fishing, thermal wastes, siltation, etc.

The Lake Ecosystem Working Group is seeking broader conceptual and methodological approaches toward a synthesis of the various more partial approaches. It is an outgrowth of two major grants to the Department of Zoology researchers in the late 1960's and early 1970's. One grant under Canada's International Biological Programme addressed a number of arctic lakes. The second grant from the Fisheries Research Board of Canada concerned holistic properties of aquatic ecosystems. Both approaches contribute equally to the current work.

Environmental Perception and Policy Working Group (Professor A.V. Whyte,
Coordinator)

This group's work has been concerned mainly with policy and management questions outside Ontario, but its general understanding of these issues may be of interest to the Commission.

The group's main purposes are to provide a resource base for those Institute members and associates whose research leads to questions of environmental policy, and to undertake research on specific aspects of environmental perception, management and public policy. An important aim of the

group is to liaise with other research groups within the Institute and the University. The scope of the working group is kept deliberately wide and its present foci are defined by ongoing projects. As new research develops it is expected that the specific foci of the group will change.

Present areas of investigation include comparative national standards and regulations for a wide range of environmental contaminants; scientific and public policy aspects of environmental risk assessments; national nuclear energy policies; public information and government confidentiality; the quantification of uncertainty; and, the input of local perception into rural development policies.

Much of the funding for the group at present comes from international agencies so that a major emphasis is on international comparisons of national environmental policies, or on developing guidelines to be used in a wide range of countries. Its methods, however, are readily transferable to the provincial and regional scales.

Population and Resources Study Group (Professor H.A. Regier, Coordinator)

The interaction of populations and resource issues is the main concern of this small but active group. The Commission's attention is drawn to a study by one of its members, C.E. Taylor, entitled The Population of Ontario: A report on size, growth, distribution policy issues, prepared for the Canada Employment and Immigration Commission. Provincial migration and population policies are a major concern of the group.

Other Institute Activities and Resources

The Institute organizes many Seminars and Conferences, which are widely attended. As part of the Sesquicentennial Celebrations of the University of Toronto, for example, it organized a Symposium on Asbestos that drew a wide

audience from the public, the scientific community, governments and the media. It is currently organizing an Advanced Research Institute on Acid Rain Phenomena for the North Atlantic Treaty Organization.

Many of its members are individually active in northern research, or in aspects of environmental policy and management. Dr. F.K. Hare, for example, recently chaired the federal study group on the disposal of nuclear wastes, which has a direct bearing on the Commission's work. Some indication of the scale of these activities is given in Appendix I.

The Institute's Resource Centre offers an excellent short-cut to bibliographic searches in the environmental arena. In addition to a good collection of periodicals, reference works and technical reprints, it has a WATDOC terminal. Its supervisor, Mrs. J. Eichmanis, will be glad to assist the Commission in any way feasible.

CONCLUSION

We end by wishing the Commission all success in its work. Many of us have had extensive experience in the north. I myself was the founder of the McGill Subarctic Research Laboratory in Schefferville, in Labrador - Ungava, in 1954. Ultimately this led to my involvement, on behalf of the native peoples, in the James Bay case. Several other members have been similarly involved. But we are not partisan. Many other members have worked in the mining, forest and transportation industries. We have a concern for employment, and for the welfare of all who have made the north their home.

The Commission is tackling a problem that exists in a similar form in nine out of ten Canadian provinces, so that its work will be under close scrutiny. It also exists in Norway, Sweden and Finland. ~~These countries are far ahead of Canada in arriving at suitable solutions.~~ We recommend that the Commission study these Scandinavian countries in detail. This Institute can recommend consultants who are thoroughly familiar with the European initiatives.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

ONTARIO MINISTRY OF HEALTH

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO MINISTRY OF HEALTH
15 OVERLEA BLVD.
TORONTO, ONTARIO

PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
416/965-9286

MANULIFE CENTRE
55 BLOOR STREET WEST
ROOM 801
TORONTO, ONTARIO
M4W 1A5

No. 203

Royal Commission on the
Northern Environment

This exhibit is produced by

Ministry of Health

this 16 day of Dec 1977

Department

SUBMISSION OF THE MINISTRY OF HEALTH

TO THE

ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

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I. INTRODUCTION

This paper provides an overview of the health services available for residents of northern Ontario north of the 50th parallel within the context of the overall provincial health system and the responsibilities of the Ministry of Health.

The paper is divided into a number of sections. Section II, immediately following this introduction, lists the major responsibilities of the Ministry of Health in relation to the provincial health system and indicates the role of the Ministry in the planning and management of the system. Section III describes briefly the federal and provincial responsibilities for the health services of registered Indians. Section IV provides detail on the health services available for residents living north of the 50th parallel. Section V gives an indication of recent activities related to health services in the remote areas of northern Ontario.

II. THE MINISTRY OF HEALTH AND THE PROVINCIAL HEALTH SYSTEM

Ministry of Health Responsibilities

The Ministry of Health has a number of responsibilities with respect to the provincial health system. The following are particularly relevant:*

- a) To advise the Government in respect of the health of the people of Ontario;
- b) To oversee and promote the health and the physical and mental well-being of the people of Ontario;
- c) To be responsible for the development, coordination and maintenance of comprehensive health services and a balanced and integrated system of hospitals, extended care facilities, nursing homes, laboratories, ambulances and other health facilities in Ontario;
- d) To administer the Ontario Health Insurance Plan.

Attachment 1 shows the Ministry organization structure and describes briefly the major responsibilities.

The Provincial Health System

The provincial health system consists of a variety of public, private and voluntary agencies. It encompasses services for those in hospitals and other institutions and for those who are in ambulatory settings such as the physician's office. It includes services for diagnosis, treatment and rehabilitation, promotion and maintenance of good health and the prevention of disease and disability.

* a), b), and c) - The Ministry of Health Act 1972; d) - The Health Insurance Act, 1972.

Delivery agencies, for example, hospitals, public health units, and nursing homes have different types of governing bodies and relate to the Ministry in different ways. These are illustrated in Attachment 2.

Development of Provincial Responsibility for Health Services

During the past two decades there have been significant changes in the health system in Ontario. The introduction of the Provincial Hospital Insurance Plan in 1959 relieved provincial residents of the costs of hospital care. During the 1960's, expansion of the system of hospital grants and loans by the provincial government enabled the development and expansion of hospitals throughout the province. In the mid 1960's, the system of insurance benefits was expanded to include physicians' services. In 1972, the hospital and medical insurance plans were combined as the Ontario Health Insurance Plan (OHIP); this made physicians as well as hospital benefits available to all residents, increased premium assistance to those in need, and exempted those over 65 from premiums. Benefits were expanded progressively to include care in the patient's home under the Home Care Program as an alternative to care in active hospitals, and care in nursing homes for those who qualify for care under the Extended Care Program. In 1974, those over 65 and others receiving social assistance were further aided by the Drug Benefit Program.

Benefits under the Plan are listed in Attachment 3, and the insurance premium structure in Attachment 4.

Federal-Provincial Funding Arrangements

The funding of the insurance program also has changed since the plans were introduced. The insurance plans were initially and continue to be funded in part from insurance premiums and in part by the provincial and federal governments. There have been significant changes in federal-provincial arrangements. When the hospital and medical plans were introduced, federal-provincial cost-sharing was program-related. These arrangements were changed in 1977 so that the federal government will transfer to the province additional tax points, a cash settlement, and a per capita cash payment. This means that rigid adherence to federally dictated programs is no longer demanded to ensure federal funding. Additional detail is provided in Attachment 5.

Increased Emphasis on Management of the System

Within the last number of years, the Ministry's emphasis has shifted from a process of planning and funding of growth to one of control of expenditures and concern with the level of service. It has been necessary to combine a humanistic concern for one of the fundamental human services of government with a managerial responsibility for one of the largest industries in the province. The Ministry's total budget exceeds \$3.8 billion - about 29% of the total provincial budget. The Ministry pays the major proportion of hospital capital costs, it meets public hospital operating costs, pays for the services provided in mental hospitals, for insured provincial residents in extended care facilities (nursing homes) or under the Home Care Program,

and for ambulance services. It also provides for a large portion of operating costs of public health units. In addition, it pays for most services of physicians and certain other health practitioners.

The Ministry must be financially accountable for the way these monies are spent. It must be responsible for the development of a balanced and integrated system of health services and facilities throughout the province. It must try to ensure the equitable distribution of services having regard for geographic and demographic realities and the differing needs from area to area in the province. All types of services, of course, cannot be made available in all communities - the more specialized the service, the more centralized its location must be. The most highly specialized, for example, open-heart surgery can be situated in only a few hospitals in university settings. The Ministry planning program, therefore, must try to create a balance between availability of service and ease of access for the patient on one hand and on the other the ability to deliver care of high quality at a reasonable cost. The planning task is made more important as well as more difficult in the present climate of fiscal constraint.

Sharing Planning Responsibility with District Health Councils

The Ministry has recognized the need for local involvement in the planning process. District health councils are being established to advise the Ministry on health planning matters for their districts. The district health councils' primary responsibilities are to identify local needs, evaluate alternatives, establish priorities, and plan a comprehensive health program for the district for which each is responsible. This is to be done within the framework of Ministry policies. Councils also have a role in the coordination of health and social services.

These councils are provincially appointed voluntary bodies made up of providers of health services, consumers, and representatives of municipal governments. All proposals for changes in facilities and in services that come from hospitals or other health delivery agencies have to be endorsed by the appropriate district health council before being considered by the Ministry. Six councils have been established in northern Ontario; three of these are involved in the area north of the 50th parallel - Kenora-Rainy River, Thunder Bay and Cochrane District Health Councils.

III. RESPONSIBILITY FOR HEALTH SERVICES FOR REGISTERED INDIANS*

The provision of health services to registered Indians is a federal responsibility. The federal government operates a number of facilities north of the 50th parallel and provides public health services. These will be referred to in the next section of this paper but not considered in detail in this submission. Use is also made by the native peoples, including registered Indians, of the provincial health system.

* "Registered Indians" - This is the term meaning a person registered pursuant to "The Indian Act".

In Ontario, part of the cost of providing health services to registered Indians has been absorbed by the provincial government. Prior to the amalgamation of the hospital and medical insurance plans into OHIP in 1972, Ontario received hospital insurance premiums from the federal government for each registered Indian. Medical coverage was paid for by the federal government. When OHIP came into being, registered Indian groups became participants, with the provincial government providing full subsidy of insurance premiums; thus Ontario was paying for all insured health services (subject to provincial-federal cost-sharing). With the introduction of the new 1977 funding arrangements, Indians are considered residents of Ontario for per capita federal grant purposes, with the province continuing to accept financial responsibility for services when provided within the provincial health system.

IV. NORTHERN ONTARIO NORTH OF THE 50TH PARALLEL

Major Problems Affecting Health

Northern Ontario and in particular those areas north of the 50th parallel present a unique set of health problems both in terms of the health needs and the organizational arrangements required to effect solutions. Health needs of the native and non-native populations are affected by a number of cultural, geographical, climatic, socio-economic, technical and other factors peculiar to this environment. Some of the more pressing problems that have been documented are:*

- a) alcohol and drug abuse
- b) high dental needs
- c) the distances to be travelled, the time involved, and the available modes of transportation.
- d) inadequate housing (especially among native people).
- e) difficulty in maintaining adequate nutrition due to inadequate knowledge, limited supply of required foods, and the high costs of those foods that are available.
- f) technical or procedural breakdown or inadequate local organization raise problems in environmental sanitation, contaminated water and food supplies, inadequate laundry, bathing, and waste disposal facilities.
- g) some communities are so small as to only justify a one-nurse health station. However, the isolation and responsibility are severe and result in high turnover rates.
- h) difficulty in attracting and maintaining required manpower to staff the health care facilities.

This list is by no means exhaustive, but only begins to illustrate the range of health related concerns that have to be addressed and the

* Report of a Study of the Future Role of the Moose Factory General Hospital, and Other Considerations Involved in Health Care in the Hudson and James Bay Area, Department of National Health and Welfare, May 1977.

barriers that now exist that must be overcome. The problems are further complicated because of divided responsibilities between provincial ministries and with the local level (e.g., pollution). They are also complicated by the divided jurisdiction between the federal and the provincial governments for health services, and the difficulty which that situation creates in achieving continuity of care.

Health facilities and Services

Hospitals and Nursing Stations - The provision of health facilities north of the 50th parallel is subject to the same considerations and implications that affect the total health system. It has already been noted that populations are small and scattered, travel is difficult, and the large percentage of native people requires shared federal - provincial responsibilities for providing health services. Therefore, any discussion of health services in the north must take into account those provided by both levels of government.

In the area under study, there are 6 hospital facilities (including 2 federal hospitals) providing a total of 282 active treatment beds, and 8 federal nursing stations each with 4 holding beds. The location of each and the numbers of beds available are shown in Table 1, on the next page. In addition, a medical clinic - part of the James Bay General Hospital - is located at Moosonee. Arrangements have been made between the federal government and the health sciences centres at Toronto, London and Kingston to provide on-site and referral back-up medical specialists to the federal hospitals at Sioux Lookout and Moose Factory. Some services are provided to others in addition to registered Indians.

Referral patterns for hospital care do not conform to political boundaries or mapping coordinates, but are influenced by such factors as road conditions, availability of transportation, perceived needs, type of health problem, and a host of other medical and/or subjective conditions. Thus, a considerable volume of health services provided to people who live north of the 50th parallel is provided in more southern centres, especially those just south of the 50th parallel, from Kenora to Hearst to Thunder Bay to Toronto. Where a patient receives care is dependent upon distance, type of resources required, and established linkages. In fact, many patients from northwestern Ontario who require more intensive levels of care travel to Winnipeg for hospitalization.

Attachment 6 (Table 2) lists health facilities in northeastern and northwestern Ontario with the bed numbers in each. Locations of facilities are shown in Figure 1. Figure 2 indicates generalized patterns of travel to hospital of those living north of the 50th parallel. (pages 25 to 27)

No mental health facilities exist north of the 50th parallel although some services are provided by visiting psychiatrists at the federal hospitals at Moose Factory and Sioux Lookout. Patients are referred outside the study area for care, primarily to North Bay and Thunder Bay; some are referred to Winnipeg. Follow-up is provided by the patient's own physician and by public health nurses.

Mental health services in the north are of concern to the district health councils as well as the Ministry and studies are now in progress which include areas north of the 50th parallel.

TABLE I
HOSPITALS AND NURSING STATIONS IN ONTARIO LOCATED NORTH OF THE 50TH PARALLEL

<u>HOSPITAL</u>			
<u>Territorial District</u>	<u>Location of Facility</u>	<u>Name of Facility</u>	<u>No. of Beds Staffed and in Operation (1)</u>
Cochrane	Fort Albany	James Bay: Fort Albany Unit	19
"	Moose Factory	Moose Factory General Hosp. (Federal)	92
Kenora	Attawapiskat	James Bay General: Attawapiskat Unit	19
"	Red Lake	Red Lake Margaret Cochenour Memorial	44
"	Sioux Lookout	Sioux Lookout General	40
"	" "	Sioux Lookout Zone Hospital (Federal)	68

FEDERAL NURSING STATIONS

<u>Territorial District</u>	<u>Name of Facility</u>	<u>Number of Beds</u>
Kenora	Big Trout Lake N. S.	4
"	Fort Hope N.S.	4
"	Kashechewan N.S.	4
"	Lansdowne House N.S.	4
"	New Osnaburgh N.S.	4
"	Pikangikum N.S.	4
"	Round Lake N. S.	4
"	Sandy Lake N. S.	4

SOURCE: Daily Census Summary, Bed Inventory, Ministry of Health, Dec. 31, 1976

- (1) This refers to the number of beds and cribs for adults and children available for patient accommodation, whether rated or not, with staff available to provide the required level and type of care.

The utilization of health facilities in the more remote areas of the north must be viewed differently than for other areas of the province. A brief review of Table 1 shows that communities north of the 50th parallel lack many types of health facilities taken for granted in more populous regions, for example, chronic hospital facilities and nursing homes. Thus facilities that are present must try to respond to the health needs of the community. In-patient beds are used flexibly to meet the level of care required by the patient, within the capabilities of the facility's services and staff. Therefore, an active treatment hospital may well provide care to patients who would be considered in need of chronic care or care in a nursing home in areas where access to such facilities exists. It is desirable to provide this spectrum of care in these facilities, as it is preferable to care for people within their community whenever possible, rather than refer patients long distances to other centres.

Public Health - The area in question is served by three types of public health agencies:

- a) The provincially operated Northern Ontario Public Health Service.
- b) Locally operated district health units - Northwestern and Thunder Bay. (The Porcupine Health Unit operates up to within twenty-five miles of the 50th parallel with offices in Hearst and Kapuskasing.)
- c) Federally operated Public Health Services.

The Northern Ontario Public Health Service (NOPHS) is a health unit administered by the Ministry of Health to provide public health inspection and nursing services to those areas of the province which the conventional health units will not accept within their areas of jurisdiction due to isolation and/or multiple problems. Since it was established in 1963 it has increased in size due to expansion into more remote areas. Seven sub-offices are located in northern Ontario, one of which is situated in Moosonee. The nursing program includes school activities such as control of communicable diseases, dental preventive services, health education, immunization, physical assessment and health testing services. Community nursing programs include the arrangement of evacuation of patients to primary care and consultants' services, hospital referrals and liaison, communicable disease control, family planning, home visits, and immunization clinics. Inspection services include communicable disease investigation, food control, private sewage system inspection, public education, recreational sanitation, school and institution inspection.

In addition, in more remote areas programs include industrial camp inspection, provincial parks and camp ground inspection, tourist establishment and outpost inspection.

Mobile dental units presently operated by NOPHS also provide services in the north. They provide preventive and treatment services to pre-school and elementary school children at no cost to the parent in remote areas where dental care is either unavailable or extremely difficult to obtain. Four mobile units are now operating in northern

Ontario and during fiscal 1978/79, four more will provide services. In the past, services north of the 50th parallel have been provided to Armstrong, Aroland, Auden, Beardmore, Eagle River, Ear Falls, Fraserdale, Ferland, Hudson, Jellicoe, Moose River Crossing, Moosonee, Nakina, Pickle Lake, Red Lake Road and Vermilion Bay. With the addition of more mobile units it will be possible to return more frequently. The intention is to provide maintenance (rather than just initial) care.

The locally operated district health units offer programs such as inspection services, nursing services, counselling, preventive dentistry, and health education programs in the southern section of the study area. The Northwestern Health Unit extends north into the Red Lake-Balmertown area and the Thunder Bay Health Unit provides services to Nakina.

The federal government provides public health services on Indian reservations.

Home Care - No home care services are available in the study area. Serious problems would be involved in mobilization and organization on the small scale of the required services due to the small populations in the centres that are there and the scattered nature of the population generally.

Vision Services - Special arrangements have been made for the University of Waterloo School of Optometry to establish an Optometric Unit at the Red Lake Hospital to provide services to the Red Lake - Ear Falls areas. In addition, mobile optometric vans staffed by the University of Waterloo and ophthalmological vans of the CNIB provide some services in remote areas.

Alcohol and Drug Abuse - In 1976, alcoholism was one of the ten most frequent diagnoses recorded upon patient separation from hospital in five of the northern territorial districts. For the province as a whole, it was the twenty-eighth most frequently recorded diagnosis. This highlights the seriousness of this problem in the north. Activities aimed at reducing the severity of the problem have taken several forms ranging from community outreach type programs to hospital affiliated programs throughout the province serving regional and/or provincial needs.

North of the 50th parallel the community based efforts that occur on Indian reservations are supported by the federal government. These programs provide a range of services from counselling to preventive education to manpower training. Alcoholics Anonymous have also expanded their services in the north in recent years.

As previously noted, hospital affiliated programs often accept referrals from all parts of the province. Examples of the types of programs operating in the north are:

Kenora - detoxification centre, halfway house, employment program for alcoholics, and in-hospital treatment program;

Thunder Bay - detoxification centre, in-patient alcohol treatment program at St. Joseph's Hospital and the Lakehead Psychiatric Hospital, male and female halfway recovery homes, and Alcoholism and Drug Addiction Research Foundation community services.

Health Manpower

One of the most difficult obstacles to the delivery of health services in the remote north is the recruiting and retaining of health professionals. This problem has been well recognized and several program thrusts have been instituted to combat it. Two of the more successful programs that are currently operating are discussed below:

Underserviced Area Program - This program, which began in 1969, is designed to attract family practitioners to establish practice in those areas of the province where family practitioners' services are most urgently needed. It is a financial incentive program. A physician who has been approved by the Ministry's medical selection committee and who establishes himself in practice in an area designated as underserviced in the north, may apply to the Ministry for a contract with a minimum guaranteed annual net professional income or an income tax free grant payable over a 4-year period. In some instances, because the population to be served is sparse or the community isolated it would be impractical or impossible to attract a doctor to establish a practice. In these situations the areas are designated as underserviced for nursing stations and a nursing station with one or more nurses has been established. Professional assistance and back-up for the nurse is arranged with physicians in nearby areas.

It is the responsibility of the municipality, if one exists, to see that adequate housing and clinic facilities are available at reasonable rent. Service clubs have been particularly successful in developing medical centres. In areas which are not municipally organized, special provincial monies are provided for construction purposes.

In northern Ontario as a whole, 56 centres have been designated as underserviced; 146 practitioners are now located in these centres, 55 of whom are practising without provincial support. Nine positions are vacant.

In the area north of the 50th parallel, 7 physicians are practising under the program - Red Lake - 3; Pickle Lake - 2; Ear Falls - 1; Moosonee - 1. One nurse practitioner position is vacant at Nakina. Minaki has been designated as underserviced for a nursing station but it has not been possible to attract a nurse. One physician at Red Lake and two at Sioux Lookout were attracted by the program but are now practising without provincial support.

Services are provided in Nakina one day a week by a physician from Geraldton on the Underserviced Area Program. Services are also provided in Savant Lake from Pickle Lake one day a week. For Armstrong, the College of Family Physicians (Ontario Chapter) undertakes to provide full-time services on a rotational basis from among its 2,300 members. This service is funded by the Ministry.

The Underserved Area Program also provides financial support for the establishment of dental practices. In the north, 55 areas have been designated as underserved, dentists are practising in 33 (8 of these now without provincial support) and 22 places remain unfilled. In the area north of the 50th parallel, one dentist is practising under the program in Sioux Lookout. Other designated areas which remain unfilled are in Red Lake - Balmertown, Ear Falls, Moosonee, and Pickle Lake. Dentists and physicians in the Underserved Area Program often practise in the same medical centres.

The Northwestern Ontario Medical Program - The Northwestern Ontario Medical Program (NOMP) is a collaborative endeavour among health professionals in northwestern Ontario and the Faculty of Health Sciences at McMaster University. The program is coordinated through the Thunder Bay Medical Society and McMaster University Faculty of Health Sciences, and funded in part by the Ministry of Health. It is an educational program emphasizing comprehensive primary health care services in a community setting (especially ambulatory services). It is centred in Thunder Bay and a number of the smaller centres in northwestern Ontario are involved. It promotes continuing education among participating professionals, explores health problems from a community and regional perspective and is planned to exert a positive influence on the distribution of physicians and other health personnel in the region.

Examples of the current principal thrusts are:

- a) To interest northwestern Ontario residents in pursuing careers in the health sciences.
- b) To encourage the development, by existing northwestern Ontario practices, of ambulatory health care teaching programs for health sciences students.
- c) To offer educational enrichment for local health professionals by assisting them in pursuing their continuing education as physicians and becoming prepared for their roles as practitioners and educators; also foreseen is the reduction of professional isolation experienced by some physicians in the region.
- d) To encourage physicians to settle in rural and remote parts of Ontario and Canada by offering training in these areas before graduation and during residency; specifically, in this case, to encourage physicians to settle in northern Ontario or rural Ontario.

The community teaching practice opportunities are presently utilized primarily by family medicine residents as the top priority, and by final year medical students and nurse practitioner trainees.

Other Programs - The federal government, in cooperation with the Universities of Toronto, Western Ontario and Queen's, operates an educational/service program at Sioux Lookout (University of Toronto) and Moose Factory (Western and Queen's). This program offers visiting medical specialists' consultant services and educational support for health promotion, prevention, training, and continuing professional development.

Ambulance Service

The provision of ambulance services in the north is complicated by a number of factors such as distance, climatic conditions, and communications problems. Attempts to overcome these obstacles have necessitated the implementation of a mix of program thrusts. Examples of the types of programs being operated are:

- a) Traditional land based ambulance service - throughout all parts of Ontario, this is the most common form of ambulance service available. Development in the Pickle Lake area has resulted in an ambulance service being established there. Ambulance services are also currently being established in Nakina and Longlac.
- b) Air ambulance service - there are two types of air service available to residents north of the 50th parallel. In the Moose Factory area, a helicopter is rented by the province for the freeze up and break up periods. This helicopter takes patients to and from the island during those periods when more conventional transportation modes cannot be used. The second type of air ambulance service being used consists of aircraft owned and operated by private couriers. They are specially equipped to function in this emergency capacity and are used by both the federal and provincial governments as required.
- c) First response units - in the more isolated areas where the distance to hospital is considerable, volunteers have been trained to provide emergency care to patients until evacuation can be arranged.

In instances where it is medically necessary for a patient to travel to and from Winnipeg, arrangements with OHIP are made to cover all or part of the ambulance costs.

V. CURRENT ACTIVITIES FOR THE AREA NORTH OF THE 50TH PARALLEL

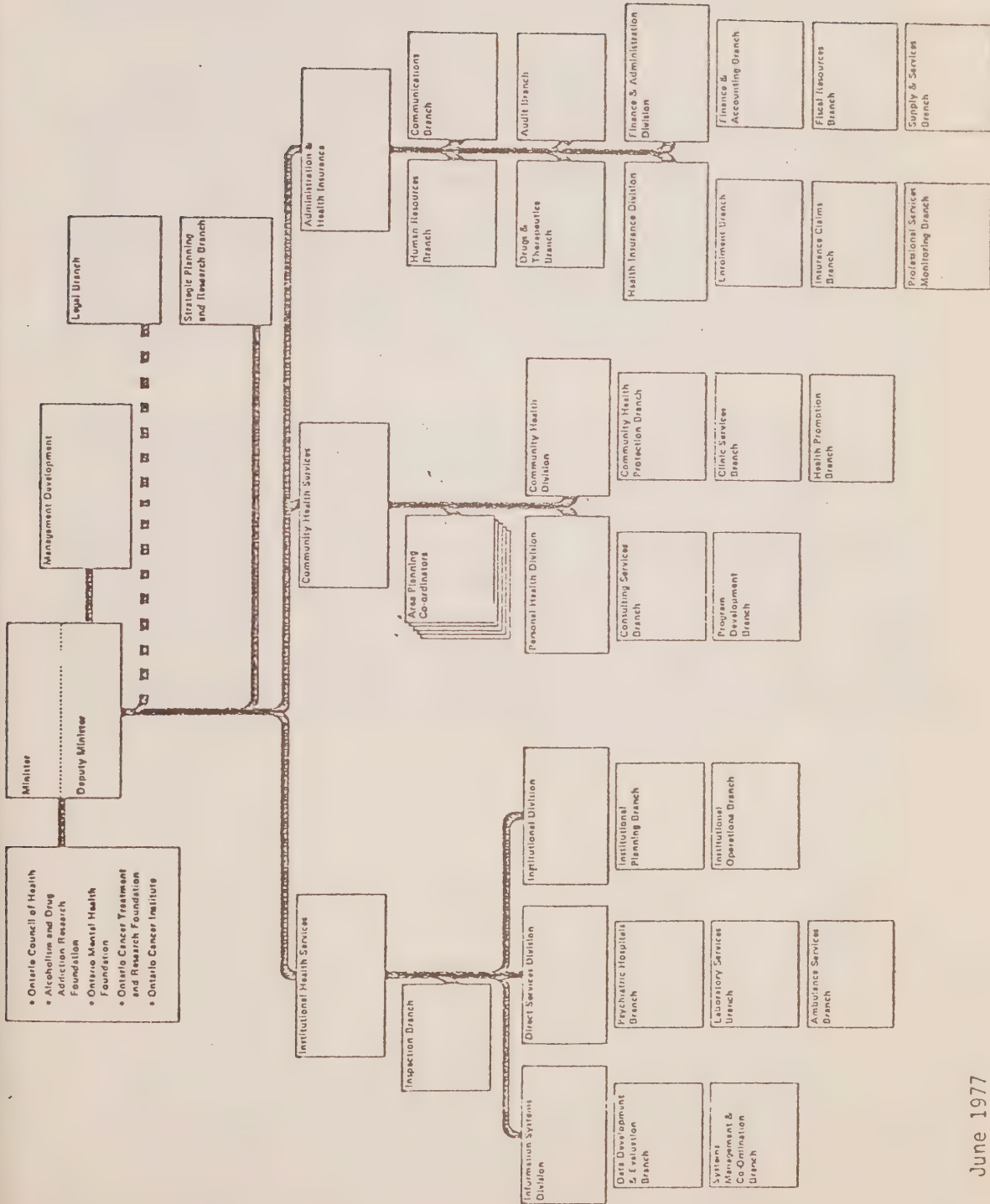
The problems of the native peoples in this area have been noted several times in this paper; the need for joint action by the federal and provincial governments and the native peoples is apparent. A study was undertaken recently to evaluate the problems and deficiencies of health care services in the Moose Factory catchment area. Members of the study team included representatives of the federal, provincial (Ontario and Quebec), and native peoples groups. The detailed recommendations of the Report are still under

consideration but action appears to be required in the following general areas:

- coordinate programs of the provincial and federal governments.
- enhance local participation by native people.
- encourage training of native people in various technical positions and health related roles.
- continue dialogue between governments and local residents.

The Ministry recognizes the problems of remote and isolated areas as well as of the native peoples. The Underserviced Area Program has been a good start in dealing with these problems. In addition, the Ministry, in its regional planning programs for northwestern and northeastern Ontario, has recognized the need to work with district health councils in the north to develop strategies to deal with the needs of scattered population and remote communities.

ORGANIZATION STRUCTURE
MINISTRY OF HEALTH



MINISTRY ORGANIZATION STRUCTURE

The overall structure of the Ministry is based generally on two primarily managerial and client-oriented groups and one staff and support group, each headed by an assistant deputy minister. The two primarily managerial client-oriented groups are: Institutional Health Services and the Community Health Services.

The Institutional Health Services Group is responsible for the translation of overall Ministry policies and specific program directions into efficient well-managed facilities and institutions. This group concentrates on the effective management, administration, and operational support necessary to carry out required care programs. Its concern is with the managerial and administrative complexity of operating facilities in order to produce optimum health care from available resources. It is responsible for giving approval to new facilities and providing advice on the construction and operation of these facilities. It also provides direct services programs such as laboratory, ambulance, and psychiatric services and ensures the provision and the development of data and information systems services. In addition licensing and inspection services are provided.

The Community Health Services Group shares responsibility for restructuring the health system in line with broad planning concepts. It is responsible for the development of policies and programs for improving the arrangements under which providers of health services work in order to produce the most effective and efficient health system possible. It is also responsible for a range of health protection and disease prevention programs carried out in the community often through public health units. This group has responsibility for the development of policies and programs which will ensure the effective delivery of care in areas of public and personal health. It is also responsible for health manpower planning, the co-ordination of health disciplines, the development of district health councils and liaison with community planning agencies. The Area Planning Co-ordinators are part of this group and form a focal point for communication between the Ministry and the district health councils.

RELATIONSHIP BETWEEN MINISTRY OF HEALTH AND DELIVERY AGENTS*

Different delivery agencies have different relationships with the Ministry of Health and local groups. Five examples show some of the differences:

1. Public hospitals are owned and operated by local hospital corporations. Voluntary boards of trustees, composed mostly of laymen, are selected by the corporation members; the Lieutenant Governor in Council also may appoint representatives to hospital boards. Boards may plan for additional facilities or changes in program, but the plans must be approved by the Ministry of Health before they can be implemented.

The Province provides most of the capital costs for approved hospital projects (66 2/3 per cent to 100 per cent), with the community being responsible for the remainder. The Province pays for operating costs for patients insured under the Ontario Health Insurance Plan. The provincial contribution averages approximately 90 per cent of operating costs with the remainder being met by other agencies such as the uninsured patient and the hospital. Hospital boards are accountable to the Ministry for the spending of these funds. They are also responsible for managing the facility and maintaining quality of care.

2. Public Health services are provided by local boards of health. These boards are autonomous, with the majority of board members appointed by the municipalities (including regional government) in the areas covered by the health units. The remaining members are appointed by the Lieutenant Governor in Council on the recommendation of the Minister of Health. The provincial government provides financial support (25 per cent to 75 per cent of costs) for approved services, and the municipalities are responsible for the remainder. Municipal governments pay the full cost of services that are not provincially supported (such as dental treatment services). When boards of health undertake programs on behalf of the Province (for example, Home Care), the Province pays the full cost of the program. Responsibility rests with the board, and the board is financially accountable to both the municipal governments and the Ministry of Health.
3. Provincial psychiatric hospitals are owned and operated by the provincial government. Day-to-day administrative responsibility is delegated to the hospital administrator.
4. Nursing homes are privately owned and operated. They are licensed by the Ministry of Health and may not be built or renovated without Ministry approval. No provincial grants are available to meet capital costs. Services are contracted for and payment is made by the Ministry, at a per diem rate, for patients who qualify for the Extended Care Program. Nursing homes are inspected by Ministry staff to ensure that standards are adhered to.
5. Most physicians and some other health professionals (such as optometrists, chiropractors and some physiotherapists) receive payments from the Ontario Health Insurance Plan directly and not through an institution. The Ministry pays for services provided to the patient by the practitioner in accordance with an agreed schedule of benefits.

* Report of the Health Planning Task Force, (Toronto, January 1974), pp. 23, 24.

INSURED SERVICES UNDER THE
ONTARIO HEALTH INSURANCE PLAN

Benefits for the professional services of physicians and other health practitioners included in the Plan are available when the person providing the service is duly licensed to practise that profession.

Ontario Health Insurance benefits are available for medically necessary services received in approved hospitals. These include public general hospitals, hospitals for rehabilitation and for convalescents and the chronically ill, and Ontario psychiatric hospitals. Benefits are also provided in most private hospitals.

Physicians' Services

The Plan pays 90 per cent of the fees listed as benefits in the current Ontario Medical Association Schedule of Fees for all physicians' services that are medically required. These services include:

- physician's services in the home, the physician's office, the hospital or institution;
- services of specialists certified by the Royal College of Physicians and Surgeons of Canada;
- diagnosis and treatment of illness and injury;
- treatment of fractures and dislocations;
- surgery;
- administration of anaesthetics;
- x-rays for diagnostic and treatment purposes;
- obstetrical care, including prenatal and postnatal care;
- laboratory services and clinical pathology when ordered and performed under the direction of a physician.

Hospital services

The Plan covers the cost of the following hospital services, for insured patients treated at an approved hospital by a licensed physician, when medically necessary, on an in-patient or out-patient basis:

- standard-ward accommodation;
- necessary nursing services, when provided by the hospital;
- laboratory and x-ray diagnostic procedures;
- drugs prescribed by a physician (except when the hospital visit is solely for the administration of drugs);

- use of operating and delivery rooms, anesthetic and surgical supplies;
- use of radiotherapy facilities;
- services rendered by any person paid by the hospital.

In addition, Plan benefits are provided for the following services when prescribed by a physician as a medically necessary course of treatment and provided in Canada by hospitals approved by the Plan:

- occupational therapy;
- physiotherapy;
- speech therapy.

Extended health care (nursing homes and homes for the aged)

Where an insured person, who has been residing in Ontario for one year or longer, requires continuing nursing service and regular medical supervision in a participating nursing home or home for the aged, the Plan will provide benefits toward the approved standard ward costs of such care. Eligible patients will be required to pay a portion of the daily standard ward costs as established by legislation, plus any additional charges for preferred accommodation if a private or semi-private room is required.

Home Care

Certain patients whose physicians prescribe additional health-care services may be able to have these services provided in their homes. Such services could be needed instead of admission to hospital, or following early discharge from hospital. To be eligible for this benefit, the patient must require limited daily care by a health professional. An insured person who qualifies for such home care through an organized Home Care Program in Ontario will not be charged for these services.

Ambulance services

If the use of an ambulance is medically necessary, an insured person is required to pay only the following amounts:

- \$5 for a land ambulance trip of 25 miles or less, plus 15 cents for each mile over 25 miles, but not more than \$25 in all, for one trip;
- \$25 for an authorized air ambulance trip (including the cost of connecting land ambulances).

Dental Care in hospital

Dentists' fees for a specified list of procedures, are covered up to 90 per cent of the 1969 Ontario Dental Association Schedule of fees when:

- a) provided to a hospital in-patient; and
- b) performed in an approved hospital; and
- c) performed by a dental surgeon who is a member of the hospital's staff.

Optometrists

Optometric services, when rendered by an optometrist, are insured benefits under the Plan. These services are paid at 90 per cent of the approved fee rates.

Drug Plan

As of August 1, 1975 Ontario's Drug Benefit applies to all persons aged 65 years and over who have resided in Ontario for the past 12 months and who are Canadian citizens or landed immigrants. Those eligible will be able to receive any of the more than 1,500 prescription medicines covered by the Drug Benefit. All medicines must be prescribed by a physician, dentist or other qualified health practitioner.

Only the drugs listed in the Ontario Drug Benefit Formulary are supplied free of charge and all prescriptions must be filled in Ontario.

Chiropractors

Benefits include chiropractic services rendered in an office, institution or home - to a maximum of \$125 per person in total in a 12 month period including up to \$25 for related x-ray examinations.

Osteopaths

Benefits include osteopathic services rendered in an office, institution or home - to a maximum of \$100 per person plus up to \$25 for related x-ray examinations, in a 12 month period.

Chiropodists (podiatrists)

Benefits include chiropodist (podiatrist) services rendered in an office, institution or home (plus independent minor procedures as permitted under the statute) - to a maximum of \$100 per person plus up to \$25 for related x-ray examinations in a 12 month period.

Out of province coverage

The Plan pays the full hospital charges (standard ward rate) for medically necessary care in a hospital acceptable to the Plan anywhere in the world except where an insured person receives non-emergency or elective care in a hospital in the United States which could have been received in Ontario. In such cases the Plan pays 75 per cent of the hospital's charges for insured services. Hospitals in other Canadian provinces bill the Plan directly for insured services provided to Ontario residents.

Insured benefits for treatment by physicians and other practitioners whether in or out of hospital will be paid at the rates applicable in Ontario.

ONTARIO HOSPITAL AND MEDICAL/PRACTITIONER PREMIUMS
1959 - 1976

<u>Effective Date</u>		<u>Premium per Month (\$)</u>		
<u>Hospital Insurance Plan</u>		<u>Single</u>	<u>Family</u>	
1/1/59		\$2.10	\$4.20	
1/10/64		3.25	6.50	
1/7/68		5.50	11.00	
<u>Medical/Practitioner Insurance Plans</u>				
<u>OHSIP, OHSIP</u>			<u>Couple</u>	
1/7/66	full pay	5.00	10.50	12.50
	partial assistance	2.50	5.00	5.00
	full assistance	nil	nil	nil
1/7/68	full pay	5.90	11.80	14.75
	partial assistance	2.95	5.90	5.90
	full assistance	nil	nil	nil
<u>Combined Hospital and Medical Plan</u>				
<u>OHIP</u>				
1/4/72	full pay	11.00	22.00	
	partial assistance	5.50	11.00	
	full assistance	nil	nil	
1/5/76	full pay	16.00	32.00	
	partial assistance	8.00	16.00	
	full assistance	Nil	Nil	

FINANCIAL ARRANGEMENTS

Historical Funding Arrangement

Under the British North America Act, the provinces have exclusive constitutional jurisdiction over the fields of health and education. During the 1950s and 60s, however, the federal government moved into these areas, at its own initiative, for reasons of "overriding national importance". With regard to health care, the overriding consideration was the perceived need to develop a public system of hospital and medical insurance, providing all Canadians with a "national standard of service". The vehicle chosen for federal involvement was cost-sharing rather than increased tax abatements to the provinces.

The particular formulas for cost-sharing of hospital and medical services varied but it is fairly accurate to say that the federal government paid 50% of the provinces' approved operating expenditures.

Development of a New Funding Arrangement

The problems of the above cost-sharing arrangements have been extensively examined by both the provincial and federal governments. While recognizing the past achievements of cost-sharing, Ontario argued that there were serious drawbacks to continuing federal assistance in this form. Ontario's objections could be summarized as follows:

- . Cost-sharing causes distortions in provincial priorities (e.g., places emphasis on use of high cost institutional care).
- . Cost-sharing involves too much bureaucracy.
- . There are undue delays in the settlement of accounts.
- . Unilateral changes or withdrawals of federal sharing leave the provinces with an unfair and unexpected burden.

The move to new financial arrangements began in 1970 and agreement was reached in 1977. Under the new arrangements, the federal government will transfer to the province additional tax points, a cash settlement, and a per capita cash payment. This means that in future, increases in federal payments will be related to the performance of the economy rather than to the amounts spent by the provinces on health care. It will also mean greater financial responsibility for the provinces.

The Established Program Financing arrangements took effect on April 1, 1977, and will continue until at least March 31, 1982. The federal government achieved its basic objective of establishing control on an open ended program whose costs were escalating at a rate exceeding the growth of the economy. The provinces achieved the flexibility they sought to plan for a more cost-effective health system.

TABLE 2 - HEALTH FACILITIES

LOCATED IN NORTHEASTERN AND NORTHWESTERN ONTARIO REGIONS

Number of Beds by Type of Facility (1)

Territorial District	Location of Facility	Number of Beds by Type of Facility (1)									
		Active	Psychiatric	Chronic	General Rehabilitation	Special Rehabilitation	Detoxification	Nursing Station	Ontario Psychiatric	Mental Retardation (2)	Nursing Homes
Algoma	Blind River	40	10								
	Elliot Lake	78	32(3)								
	Hornepayne	16	8								
	Richard's Landing	10									
	Sault Ste. Marie	391	20	81						270	210
	Thessalon	17									148
	Wawa	34	4								
	Sub-Total	586	20	135						270	366
Cochrane	Cochrane	46	8								
	Fort Albany	19								62	
	Hearst	58	2	19						61	
	Iroquois Falls	40									69
	Kapuskasing	82	5							60	71
	Matheson	30									
	Moose Factory (Federal)	92									
	Smooth Rock Falls	19									
	Timmins	218	20							91	177
	Sub-Total	604	22	32						274	317

(1) This refers to the number of bed- and cribs for adults and children available for patient accommodation, whether rated or not, with staff available to provide the required level and type of care.
(2) Under the administration of the Ministry of Community and Social Services.
(3) Includes Retardation Beds.

Territorial District	Location of Facility	Location of Facility										
		Active	Psychiatric	Chronic	General Rehabilitation	Special Rehabilitation	Detoxification	Nursing Station	Ontario Psychiatric	Mental Retardation	Nursing Homes	Homes for the Aged
Kenora	Attawapiskat	19										
	Dryden	63		12								
	Kenora	94	20	36			40			76	211	
	Red Lake	44										
	Sioux Lookout (includes Federal)	108										
	Sub-total	328	20	48			40	32		76	211	
Manitoulin	Little Current	44		16							60	
	Mindenoya	23										
	Wikwemikong									28		
	Sub-Total	67		16						28	60	
										60		
Nipissing	Mattawa	31								125	243	
	North Bay	344		40				355	39			
	Sturgeon Falls	85									124	
	Corbeil									120		
	Sub-Total	460		40				355	39	305	367	

Territorial District	Location of Facility	Type of Facility									
		Active	Psychiatric	Chronic	General Rehabilitation	Special Rehabilitation	Detoxification	Nursing Station	Ontario Psychiatric	Mental Retardation	Nursing Homes Aged for 18
Parry Sound	Burk's Falls	22									
	Parry Sound	108		44						16	101
	Port Loring									13	
	Trout Creek										74
Rainy River	Powassan									29	175
	Sub-Total	130		44							
	Atikokan	21		4							
	Emo	23									
	Fort Frances	95		12							168
	Rainy River	14									
Sudbury District	Sub-Total	153		16							168
	Chapleau	26		4							
	Espanola	36									
	Sub-Total	62		4							
Sudbury R.M.	Sudbury	733	102	98						523	387
	Nickel Centre									80	
	Sub-Total	733	102	98			17			603	387

ATTACHMENT - 7

INTRODUCTION TO FIGURES

Figure #1

Figure one shows the location of all Provincial Hospital Centres in northern Ontario, as well as the Federal Hospitals and nursing stations. A hospital centre is defined as a municipality or other community which contains one or more active treatment hospitals. As can be seen from Table #2, hospital centres often contain a variety of other types of health care facilities such as chronic hospitals, nursing homes, and psychiatric facilities.

Figure #2

This figure is designed to provide a general picture of where Ontario residents north of the 50th parallel go to receive their hospital care. The travel patterns are computed from residence information recorded on hospital discharge forms. For each area shown travel patterns have been arranged in three categories:

- a) Destination of 10-50 percent of all hospitalized patients in 1976.
- b) Destination of more than 50 percent of all hospitalized patients in 1976
- c) Out-of-Province destination

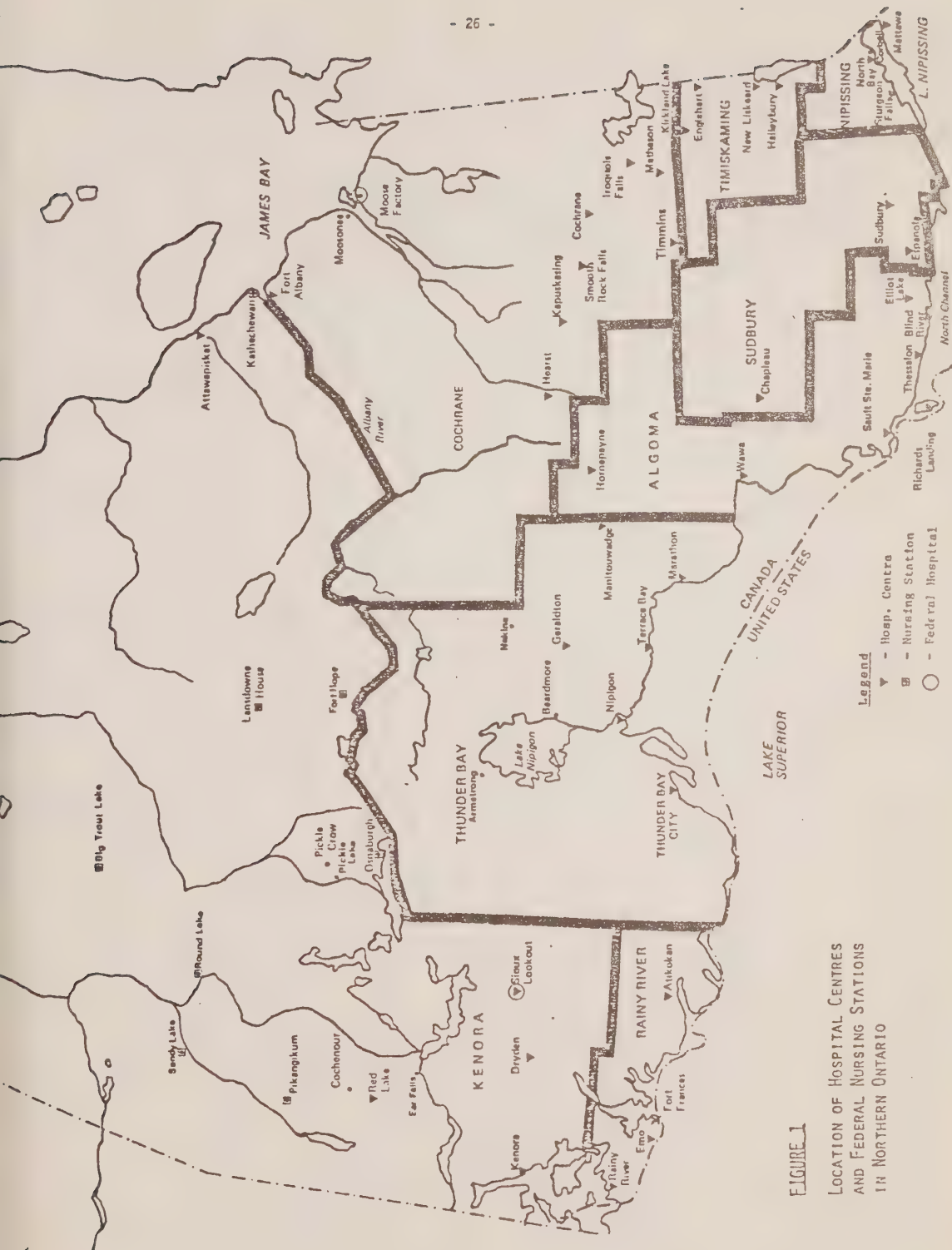


FIGURE 1

LOCATION OF HOSPITAL CENTRES
AND FEDERAL NURSING STATIONS
IN NORTHERN ONTARIO

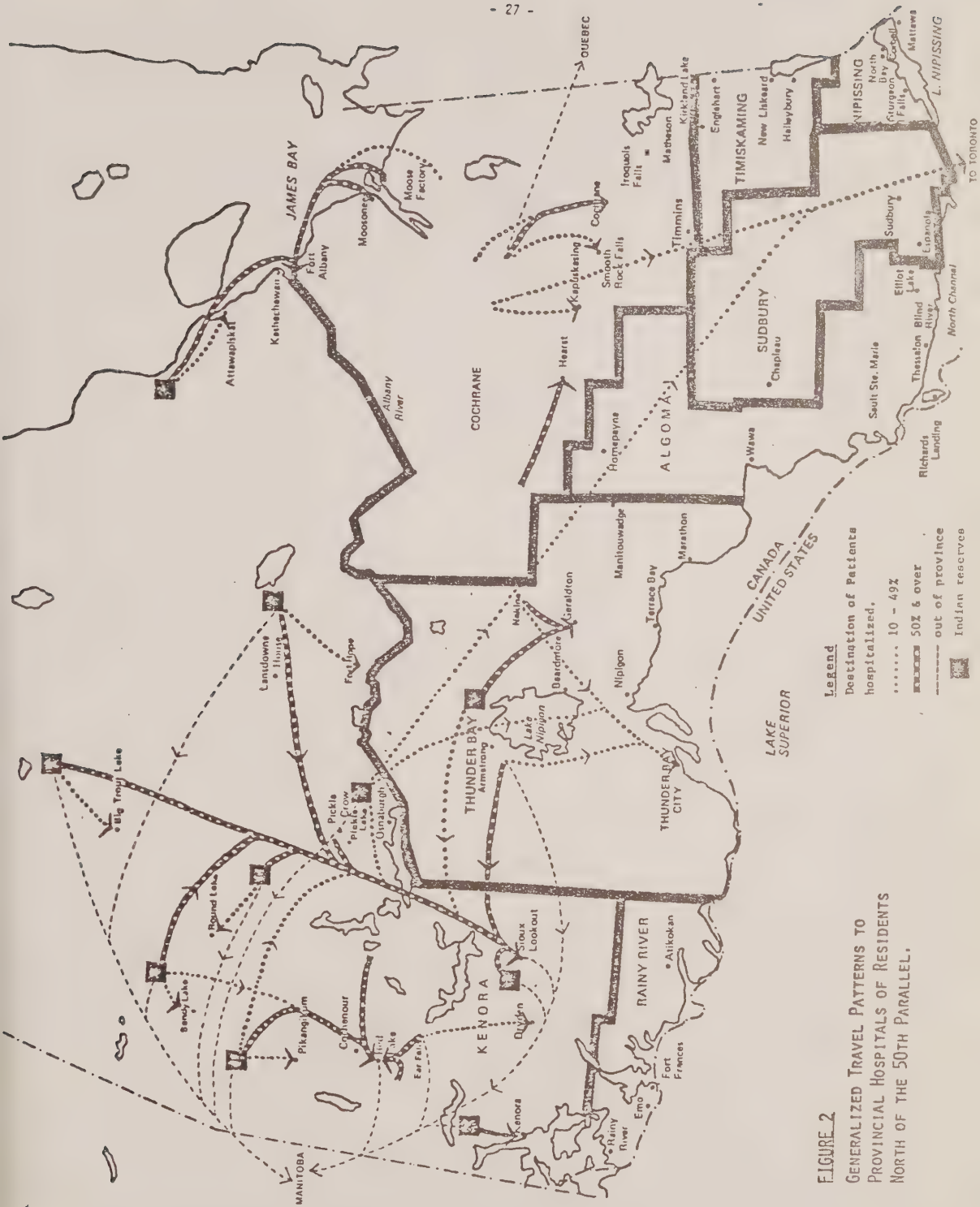


FIGURE 2

GENERALIZED TRAVEL PATTERNS TO
PROVINCIAL HOSPITALS OF RESIDENTS
NORTH OF THE 50TH PARALLEL.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO PUBLIC INTEREST
RESEARCH GROUP

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
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TORONTO
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ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
416/965-9286

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ROOM 801
TORONTO, ONTARIO
M4W 1A5



E. 204

No. 204

Royal Commission on the
Northern Environment

This exhibit is produced by

Ontario Public Interest Research Group
this 16 day of Dec. 1977
S. J. [Signature]

Submission to

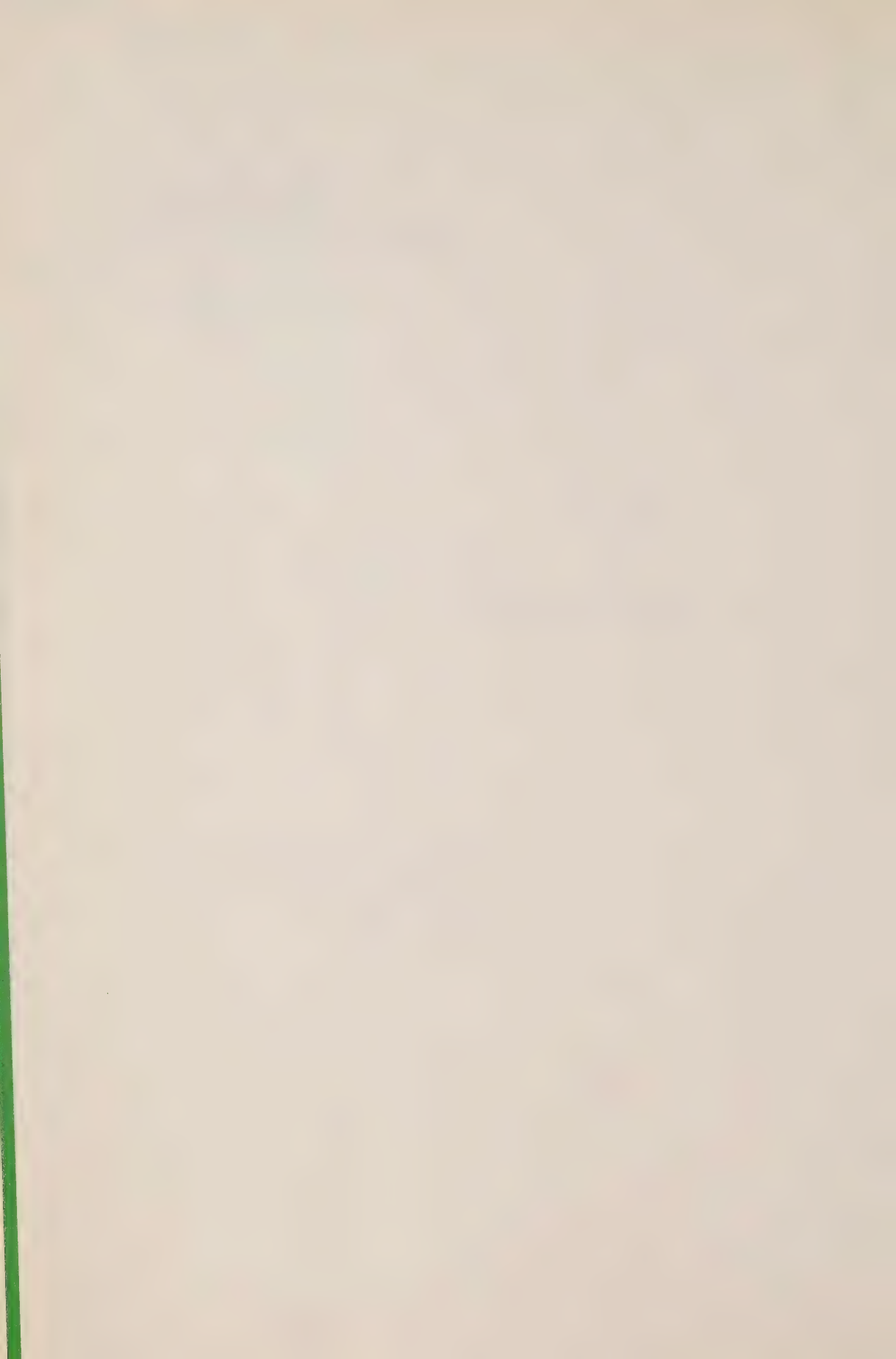
THE ROYAL COMMISSION ON THE

NORTHERN ENVIRONMENT

Submitted on December 15, 1977

by the Ontario Public Interest

Research Group



I am speaking on behalf of the Ontario Public Interest Research Group. The Ontario Public Interest Research Group is a student-funded, student-controlled organization which presently has chapters at five Ontario universities. OPIRG uses students and student-employed staff to research, and provide action and education to assist community groups.

OPIRG has been involved in issues of central concern to northern Ontario in the past through publication of a tabloid on mercury pollution and a corporate profile of Reed International. At the Pickle Lake hearing the Waterloo chapter of OPIRG discussed the reasons for the types of problems resulting from corporate exploitation in Northern Ontario. More often than not the motives of large trans-national corporations based in distant metropolitan centres and the needs of local people are in direct conflict.

Before moving on to comments aimed directly at the Commission and its workings, let me state briefly a few of the most important factors that should be incorporated



in planning future development north of 50°:

- Most important perhaps is the demand of Native people for self-determination, both culturally and economically.

- The goals and direction of any development schemes should be set locally.

- Pursued development options should not be detrimental to either local social patterns and culture, or to the capacity of the local environment to adapt to changes.

- This restriction means that development should proceed slowly and have long-term, as well as short-term, benefits for the region.

- By moving secondary industries into northern Ontario, the people of the north can increasingly take part in various stages of production.

- Such a change would alter the present exploitive-extractive nature of what has generally been termed "development".

This Commission's efforts to inform the media and the public of its activities thus far have been inadequate. Public interest groups that are already active in areas of concern to the commission are finding it difficult to keep track of what the commission is doing; those groups that are not yet involved are not being incorporated into the workings of the commission. Although outlining for itself a broad outlook, the commission to date has held-back from offering any direction to the groups concerned with its mandate. This has meant that the knowledge that individuals and organizations have of the commission has been limited to media coverage -- and media coverage has not always been complete or unbiased.

It is imperative that the commission publicize every step it undertakes. We are told that copies of briefs are to be distributed throughout the province. However, the list of libraries which will receive briefs is not a long list; the list of libraries which will receive full transcripts has not yet been released. The sites for collection of commission materials should be more varied and more ex-

tensive.

The commission, in order to foster full participation throughout the province, must travel to people's places of residence. Hearings should be held in all Native communities, small settlements as well as larger towns. Hearings should be scheduled at a time of year when it is both convenient and easy for people to get to the hearings. This is particularly important for Native people travelling to settlements in order to speak before the commission.

Although the questions of what types of development and how much development should take place in Northern Ontario are of paramount importance to residents of the North, people throughout Ontario and Canada will be affected by the direction future development takes in Northern Ontario. It is therefore crucial that southern Ontarians have an opportunity to make their views known.

To this end, hearings should be held throughout the southern portion of the province. Obviously, two days

of hearings in Toronto is insufficient to accomodate the large number of concerned individuals in southern Ontario.

To insure extensive public participation, resources must be made available to citizens' groups and Native people to use as they see fit in preparing briefs and taking part in hearings. Extensive funding of groups and individuals should be accompanied by access to commission information and personnel. Full access to government documents relating to areas of concern should be demanded by the commission to assist groups researching briefs.

OPIRG urges the commission to keep the broad perspective outlined in its stated mandate. We are well aware that development issues cannot be adequately examined without understanding both short and long-term influences on social, economic and cultural conditions. The broad perspective undertaken allows the commission to look at development in its entirety, to examine combined effects of projects, and to avoid a piece meal approach.

However, OPIRG is very concerned that the commission intends to make no recommendations about specific development projects. It is important that the impact of projects such as the Onakawana Project and proposed Ontario Hydro river diversion and damming schemes be analysed individually and in combination and that recommendations specifically concerning these projects be included in your report.

At this time OPIRG strongly urges the commission to call for a complete moratorium on all capital-intensive development north of 50°. If development projects are allowed to proceed before the commission's study terminates, the recommendations of the commission will be no more than an empty gesture.

Your commission contains within it the possibility of positively influencing the future of northern peoples and the northern environment, and of bringing together concerned people in both southern and northern Ontario. OPIRG hopes that this possibility can be actualized.

Thank-you for the opportunity to address the commis-

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

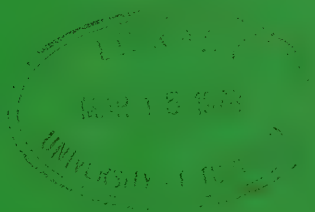
ONTARIO MINISTRY OF EDUCATION

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



Ontario

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO MINISTRY OF EDUCATION
OFFICE OF THE MINISTER
MOWAT BLOCK, QUEEN'S PARK
TORONTO, ONTARIO

PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
416/965-9286

MANULIFE CENTRE
55 BLOOR STREET WEST
ROOM 801
TORONTO, ONTARIO
M4W 1A5

SUBMISSION EXHIBIT NO. 205

NOTE:

ATTACHED TO THIS SUBMISSION
WERE THE FOLLOWING:

- 1) A BOOK ENTITLED "THE
EDUCATION OF ADOLESCENTS
IN REMOTE AREAS OF ONTARIO"
PREPARED BY THE MINISTRY,
- 2) TWO BOOKLETS BOTH ENTITLED
"PEOPLE OF NATIVE ANCESTRY"
PREPARED BY THE MINISTRY.

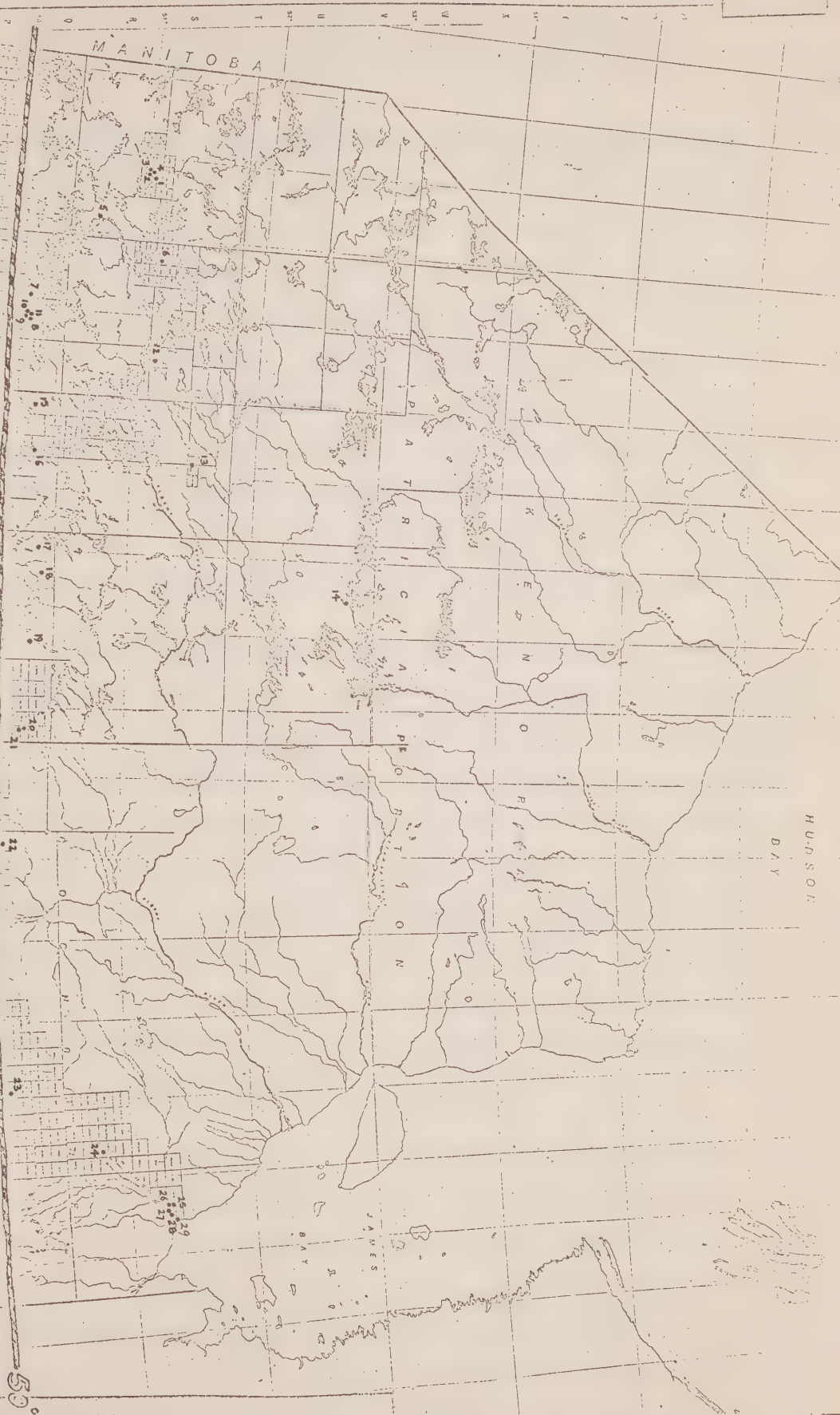
THESE ATTACHMENTS CAN BE VIEWED
AT THE COMMISSION OFFICES, 55
BLOOR STREET WEST, SUITE 801,
TORONTO, ONTARIO.

EDUCATION NORTH OF 50°

Brief From The Ontario Ministry of Education
To The Royal Commission On Northern Environment

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50°

Submission From The Ontario Ministry Of Education
To The Royal Commission On Northern Environment

1. INTRODUCTION & DESCRIPTION OF EDUCATIONAL ENVIRONMENT

The B.N.A. Act gives primary responsibility for Education to the Provincial Government. Hence the Ontario Minister of Education is responsible, through the Ministry of Education, for the provision of elementary and secondary education throughout the province. School Boards are established in accordance with The Education Act, 1974, in all centres where sufficient children are present to warrant the operation of a school. For isolated students, the Ministry provides correspondence courses or room, board, and transportation allowances so that they may obtain an education away from home.

Local ratepayers are responsible for meeting a proportion of education costs based on a provincial assessment equalization formula and local School Boards are responsible for administering program development and delivery in accordance with provincial policies and guidelines. School Boards also are responsible for initiating construction of facilities, organizing and administering schools, and developing programs of instruction. In Northern Ontario or elsewhere, where geographic, demographic or socio-economic factors limit the capacity of School Boards in meeting the above responsibilities, these devolve upon the Ministry of Education Regional Office staff.

The B.N.A. Act gives primary responsibility for Native peoples to the Federal Government. Hence the Federal Department of Indian and Northern Affairs accepts responsibility for the education of Indians on reserves. For elementary pupils it either provides schools or purchases schooling from an adjacent School Board. Virtually all secondary education is purchased and, in some cases, the children have to travel a great distance to receive it.

EDUCATION UNDER ONTARIO JURISDICTION

Board	School Name	No. of Teachers	No. of Pupils	Grades	
1 Red Lake	Balmertown-Cochénour	20	376	K-8	
2 Red Lake	Red Lake P.S.	24	410	K-8	
3 Red Lake	Red Lake D.H.S.	30	421	9-13	
4 Red Lake RCSS	St. John'S	5	98	K-8	
5 Red Lake	Ear Falls P.S.	18	433	K-8	
6 Dent DSA	South Bay P.S.	3	70	1-8	
7 Dryden	Hudson P.S.	8	148	K-6	
8 Dryden	Central P.S.*	20	428	K-8	
9 Dryden	Wellington Sr. P.S.*	8	169	7-8	
0 Dryden	Queen Eliz. D.H.S.*	27	425	9-13	
1 Dryden Dist. RCSS	Sacred Heart	12	217	K-8	
2 Slate Falls DSA	Slate Falls P.S.**	1	24	1-8	
3 Connell & Ponsford DSA	Crolancia P.S. (Pickle Lake)	13	300	K-10	
4 Summer Beaver DSA	Summer Beaver P.S.**	2	60	1-8	
5 Savant Lake DSA	Savant Lake P.S.	2	50	1-8	
6 Allanwater DSA	Allanwater P.S.	1	25	1,4-5,7-8	
7 Armstrong DSA	Armstrong P.S.	4	90	JK-8	
8 Ferland DSA	Ferland P.S.	2	28	JK-7	
Auden DSA	Auden	2	30	JK-1,3-5	
Nakina DSA	Nakina P.S.	4	88	7-8	
N. Of Superior Dist. RCSS	St. Brigid (Nakina)	4	51	JK-8	
Bicknell DSA	Pagwa River P.S.	1	17	1-8	
Smoky Falls DSA	Smoky Falls P.S.	1	6	K-5,7-8	
Canfield DSA	Canfield District P.S.	2	32	K,2,4,6,8	
James Bay Lowlands SS Board	Northern Lights S.S.	16	160	1-8	
Moosonee DSA	Moosonee P.S.	12	200	9-11	
Moosonee RCSS	Bishop Belleau	11	215	K-8	
Moose Factory Island P.S.				K-8	
Board	Main P.S.	11	160		
Moose Factory Island Ird.	Moose Fort P.S.	12	254	5-8	
				K-5	

These are in Sioux Lookout **Access Seasonally Interrupted

Abbreviations:

- S - Roman Catholic Separate School
- P.S. - Public School
- D.S.A. - District School Area
- S.S. - Secondary School

Historic development patterns in Northern Ontario have resulted in the existence of small communities that do not contain sufficient school-age children to justify the broad range of services found in other parts of the Province. Some of these communities are growing as a result of new development, while others remain as vestiges of earlier resource or railroad development. While each community is unique, some common conditions keep recurring.

In many cases pupils have to go elsewhere for secondary education - either by daily buses or boarding away from home for weeks at a time.

Often there is a lack of people with the education, motivation, and self-confidence to assume leadership as members for the School Board.

Similarly, often the community lacks people qualified to build or maintain the schools and their equipment (Diesel-generators, etc.).

The population is frequently too small to justify adult education programs (nutrition, health care, leadership skills, home construction/maintenance). Sometimes the community lacks individuals with the skills to identify such needs and provide for them.

There are very limited social/cultural amenities to back up the school programs: libraries, theatres, rinks, clubs, music, etc.

Communities with a small local assessment base have difficulty raising capital funds locally, under the grant regulation.

School Boards providing education for small numbers of pupils have several inherent disadvantages. Many board responsibilities such as planning, purchasing of supplies and equipment, maintenance and repairs, staff and financial administration, program supervision and compilation of statistical data depend for efficiency on a volume of work that is not present in small boards.

The disadvantages are accentuated by a history of fluctuating population levels in Northern Ontario. In a small community, a family moving out can take 1/3 to 1/4 of the total school-age population away!

While funding is assured through a grant structure based on needs, declining enrolments affect the local need for staff and the demand for services. For example, once a local school is set up, or programs established for exceptional pupils - elimination of such services may inflict busing and other hardships on the remaining children and their families. Hence, such cutbacks meet with stiff opposition.

As a result Boards face 3 alternatives, all unpalatable: hire a full-time teacher for a tiny enrolment; put pupils on correspondence courses; or send them away from home to room and board elsewhere.

Small staffs find it difficult to carry out adequate curriculum development to follow Ministry of Education guidelines and to meet local needs. It may be that local expertise is non-existent, or an impossible workload is created for the few qualified to do it. Small staffs usually lack sufficient numbers to provide local professional development

opportunities for teachers and principals. Hence individuals must assume heavy costs of time, money, and effort for professional upgrading, and boards can obtain resources from outside only at a high cost. They also cannot afford to engage people for adequate support services (psychological, social, remedial) for pupils with learning disabilities.

Efficiencies can be further crippled in small communities where a public and a Roman Catholic school divide a small enrolment or a school has to provide programs both in English and in French.

...progress...

A surplus of qualified teachers in Ontario together with the Northern Corps, which was set up by the Ministry to recruit and train teachers for the isolated schools, has led to higher staff competencies. The Northern Corps also provides a uniform salary schedule for the 19 Isolate Boards, along with a special allowance for the teachers working in those Boards.

Audio-visual equipment is now located in every school, and this assistance is supported by Ministry of Education Regional Office media centres in Thunder Bay & Sudbury.

Special funding formulae have allowed for many new and renovated schools, and operating costs weigh lightly on the isolated boards: they are only required to levy a maximum of 8 mills upon local assessment since provincial grants cover the balance of costs.

Ministry of Education Regional Office staff provide help with curriculum development and professional development as well as administration and supervisory services where necessary for the northern School Boards.

The Ministry of Education funded a report on "The Education of Adolescents in Remote Areas of Ontario" by Dr. D.W. Ryan, at the Ontario Institute for Studies in Education. Its recommendations are being studied and implemented where feasible.

It is difficult to foresee a time when small isolated communities will be able to offer full educational opportunities meeting the needs of all children. Isolation, time and costs of travel, and restricted social and economic conditions work against achievement of an ideal. As long as land use policies allow the establishment and continuation of pockets of settlement, the problems of educational delivery will remain.

Accepting the above facts of life in the north, two major issues emerge as critical factors for achieving a realistic optimum level of educational opportunity for the costs incurred. These are leadership in all its aspects and teacher qualifications.

...future possibilities...

- Provide assistance to teachers in isolated schools, in selection of learning materials.
- Encourage correspondence courses for the teachers, covering pedagogy and subject specialities, as a means of upgrading.
- Develop relevant curriculum programs for northern schools in a cooperative effort between School Board and Regional Office staffs, using the North West Territories/Manitoba/Federal Government material as examples.

- Consider consolidation of some isolated one-school boards into a single "Northern Corps Board" to achieve a large enough scale of operations to allow it to hire business and administration staff, supervisory officers, and curriculum assistants.

(A)

CHILDREN WITH DISABILITIES

Services that are complementary to school programs are provided by a number of organizations or branches of Ministries other than the Ministry of Education. Agencies providing services to children with disabilities in northern Ontario and limited services north of the 50th parallel include the following:

Ministry of Health - Psychiatric Units, Residential Mental Health Centres and Outpatient Community Mental Health Centres

Ministry of Community and Social Services - Child Welfare Services under Children's Aid Societies.

Ministry of Correctional Services - Probation and After Care Offices, Group Homes and Training Schools.

The Ministry of Education Regional Offices also provide some services to these pupils, e.g. special education and guidance services.

Liaison and coordination among such agencies permits services to children and families that would otherwise not be available. In northern Ontario it is important that there be good communication, cooperation and mutual understanding of objectives among publicly financed agencies in order to provide consistent treatment patterns with adequate follow-up and effective implementation of programs prescribed for students.

For many services there are indications that levels of utilization are high and services are of a high quality. School Boards indicate satisfaction with the services provided by Public Health Nurses, hospitals and Children's Aid facilities where they are available. However, there are large gaps in the availability of other important services to children.

Where no adequate services or lack of contact has been reported, 9.
the problems mentioned have included inadequate communications,
staff turnover, distances to facilities, lack of awareness and
understanding of assistance programs, lack of bilingual staff,
and lack of community participation. It is apparent that
non-coterminous jurisdictional boundaries and lack of coopera-
tive planning prevent optimum utilization of all services.

Education Programs For
Disadvantaged Pupils

	<u>School For</u> <u>Trainable</u> <u>Mentally</u> <u>Retarded</u>	<u>Special</u> <u>Education</u> <u>Classes or</u> <u>Teachers</u>	<u>Remedial</u> <u>Reading</u> <u>_____</u>	<u>Other</u> <u>_____</u>
Sioux Lookour	2 classes	2 classes	1 teacher	H.S. Occupational Program
Moosonee	1 class	1 teacher		
Moose Factory Island		1 teacher		
Red Lake	1 class	2 classes	1 teacher	Psychometrist H.S. Occupational Program
Ear Falls	send pupils to Red Lake	1 class		
Nakina	send pupils to Geraldton			

Current needs that can be identified include:

- . psychological services in the French language for
much of the District of Cochrane
- . additional staff to assist in teacher in-service
programs and to implement prescribed programs for
students
- . community based mechanisms to encourage inter-agency
cooperation and coordination
- . group homes for children to retain them within their
home community.
- . special education services, e.g.) assessment,
programming, and staff development

- . transportation and accommodation aid for pupils and parents travelling to urban centres for testing and assessment.

...progress...

There have been a number of successful projects developed to meet needs for support services. Examples include coordination with the Regional Child Care Centre in Thunder Bay to provide psychological services in the northwest and coordination among St. Mary's Hospital, the Ministry of Community and Social Services, local School Boards and the Ministry of Education to provide clinical diagnosis services in Timmins and surrounding areas, more recently.

A Children's Services Division has been established within the Ministry of Community and Social Services to re-organize and coordinate all services to children in the Province. (Comsoc, Health, Corrections and the Attorney General)

...future possibilities...

A comprehensive program is needed to provide support services to children in all matters that are outside the boundaries of programs provided by School Boards. There is need for a broad range of support services that are clearly identifiable by the potential users, available on a consistent basis and capable of serving needs in both English and French.

Steps can be taken to:

- . Arrange for incentives to Boards to cooperate to share resources
- . Encourage retention of children in their home communities for treatment wherever possible

- . Establish a model program for delivery of support services within one geographic area
- . Develop cooperative effort by agencies to promote a proper nutrition program for school age children
- . Survey to find out what the needs really are:

e.g. Special Education

Speech Therapy

Physical Therapy

Hearing and vision assessment, etc.

Just south of the 50⁰ line Longlac and Geraldton - North of the 50⁰ line Ferland and Nakina are communities where the first language of a significant percentage of the population is French. There are also small Francophone communities in other locations throughout the region. This requires provision of regular programs in French at both elementary and secondary levels. In addition, demand is created for children whose first language is other than French to achieve a level of proficiency in the French language. In small school systems these programs pose problems of fragmentation of resources and budgets. A clear need exists for long range planning and acceptance of goals within each system where there is dual programming since changes in program inevitably require adjustments both in staff and allocation of resources. These plans and goals should be ones to which the communities they serve are committed.

The provision of equivalent opportunities within French language programs poses a number of problems because the size of the Francophone population is small in total numbers and geographically dispersed. Examples of problems associated with French language education programs include the following:

- . shortage of good learning materials
- . inadequate opportunities for professional development
- . inability to provide support services (psychiatric, psychological, social, remedial)
- . high costs of dual programming in small secondary schools
- . shortage of qualified secondary teachers to extend high quality immersion programs into secondary schools
- . shortage of specialist consultative assistance in key subject areas such as primary education, vocational education, mathematics, etc.

...progress...

Over the past few years momentum has been established in the provision of French language education. This has been reflected in the establishment of a number of unilingual French language secondary schools, dual French and English programs in a number of other secondary schools and immersion, extended, and French as a second language programs in elementary schools. A milestone is the introduction in 1977 of additional grants and other incentives to increase the availability and depth of programs in French for pupils in elementary and secondary schools. (See Teaching and Learning French as a Second Language: A new program for Ontario students). These represent considerable achievements. Other policies and programs designed to maintain momentum toward parity in educational opportunities include the following:

- . addition of French language staff to regional offices
- . provision of French language consultative services in a number of subject areas
- . provision of supervisory services in French
- . development of specific learning materials in French language by Curriculum Branch
- . financial support for the Centre Franco-Ontarien to assemble and make available learning materials.
- . assistance in curriculum development for implementation of Ministry curriculum policies
- . special French language professional development funds for teachers (memo 13)
- . compiling and dissemination of teacher-produced learning materials (Sudbury)
- . provision of direct services to teachers and students in Special Education
- . sharing of personnel between regions for special assignments
- . simultaneous release of Ministry of Education materials in French and English

- . increased availability of French language films through Sudbury Resource Centre
- . special programs to increase teacher training opportunities in French immersion and French as a second language
- . encouraging production of learning materials in French through the Learning Materials Development Fund

...future possibilities...

It should be recognized that development of quality educational programs and services can take time. A number of needs for services in the French language remain partially unfilled.

Among these are the following:

- . student support services
- . curriculum assistance in a number of specific fields (primary, mathematics, vocational education)
- . more opportunities for professional upgrading, including workshops, summer and winter courses
- . curriculum resource materials
- . assembly and cataloguing of professional materials.

By provision in the British North America Act of 1867, the Government of Canada was charged with the responsibility for Indian people. The responsibility for Indian education is defined by the Indian Act and the treaties. Other Native people who are not Indians according to the definition in the Indian Act are the responsibility of the Province.

In accordance with the legal jurisdictions, the Ministry of Education traditionally affected the education of Native peoples in three aspects, namely: curriculum, (the Department of Indian Affairs and Northern Development adopts the provincial curriculum); teacher education and certification; and textbooks and reference materials.

Through the Meetings '71 and subsequent years (a process funded by the Ontario Government whereby the Registered Indians in Ontario make known the provincial services that they would want to receive), the Ministry of Education was informed of the Native people's educational needs.

The Government of Ontario established a mechanism, the Joint Steering Committee, consisting of Indian Chiefs and members of Cabinet, for the purpose of consultations. A Minister has also been named as Co-ordinator of Native Affairs.

The Ministry of Education, in recognition of the need for the development of policy and procedures related to the development and implementation of programs in Native education, has established the Native Education Co-ordinating Committee. Officials from five branches of the Ministry constitute the membership of the committee. Concerns of the Native people pertaining to education are directed to this committee. The Committee then co-ordinates Ministry responses to best meet

On June 30, 1976, the Task Force on the Educational Needs of Native Peoples presented its Report to the Minister of Colleges and Universities, the Minister of Education, the Minister of Culture and Recreation and to the Minister of Indian Affairs and Northern Development (D.I.A.N.D.). The Report consists of observations, recommendations and briefs of persons who addressed the Task Force. It was concluded that:

1. certain concerns are common to all Native peoples in Ontario;
2. there is a need for an ongoing mechanism that would oversee the implementation of the recommendations of the Task Force.

To that end, the Task Force recommended the creation of a Council on Native Education.

The Ministry of Education was directed by the Honourable M. Birch, Provincial Secretary for Social Development, to determine the membership and terms of reference for the proposed Council in concert with representatives of the five Native political organizations and the D.I.A.N.D. The paper emanating from these discussions will be presented to the Provincial Secretary for Social Development in January, 1978.

Special counselling and guidance services are provided at Thunder Bay and Red Lake by the Ministry of Education for Native pupils boarding and taking secondary education there.

Native Teacher Education Programs

In addition to regular teacher education programs offered by Ontario Colleges and University Faculties of Education, the following programs are of special interest in the area of Native Teacher Education.

- 1) Teacher Education for Native People -
Faculty of Education, University of Western Ontario

A two-year limited enrolment program designed to certify people of Native Ancestry as teachers. Admission is open to Status Indians and Native people registered with a recognized Native People's organization. A University Committee on Admission adjudicates all applications and seeks the advice of appropriate members of the Native community in determining the eligibility of applicants for the program.

Candidates who pass all courses in the program and obtain a satisfactory rating in teaching practice, are recommended to the Ministry of Education for a basic teaching certificate.

- 2) Native Teacher Education Program -
Faculty of Education, Lakehead University

Also a two-year program, designed to increase the number of qualified Native teachers, particularly in North-western Ontario. To this program are admitted persons of Native descent who are recommended by a Native organization, and who meet one of the following conditions:

- (1) Successful completion of any Ontario Grade 13 program acceptable to the University as satisfying the entrance requirement with an average of at least 60%
- (2) With respect to mature students, candidates who have not completed Grade 13 will be considered on an individual basis by the Native Education Staff

Students who successfully complete the program, will be eligible for a basic teaching certificate valid for teaching in the elementary schools in Ontario. Both of the above programs are open-ended to allow completion of a degree, and some students have decided to do so, rather than enter teaching after the two years of the certificate program.

Professional Development for Native People

1. It is the policy of the Ministry of Education, Ontario to support the aim of the Native people to conduct the education of Native children according to the wishes of the Native people.
2. To this end, the following Professional Development activities are supported by the Ministry of Education, Ontario.
 - (a) The Ministry established a new "Native Counsellors Certificate" and created a 3-summer program of training. Forty people of Native ancestry attended the first session in the summer of 1977.
 - (b) Contracts between Native groups and the Ministry of Education, Ontario, have been let for the development and production of Native learning materials as well as for the development of a Native resource materials centre in Timmins.
 - (c) Lakehead University and the University of Western Ontario are continuing to offer special pre-service courses for Native people.
 - (d) Officials of the Ontario Ministry of Education are available to interpret The Education Act, 1974 and all its Regulations for Native groups.
 - (e) During the implementation of the teacher's resource guide, People of Native Ancestry, in-service sessions were conducted in Native communities.

THE JAMES BAY EDUCATION CENTRE

This facility in Moosonee consists of several large shop areas, commercial areas, a gymnasium, a library and ancillary classroom and administrative areas. A portion of the building is rented on a part-time basis by the local public and separate schools so they can enrich their programs through the use of the gymnasium, shops and library.

The Centre is an Ontario corporation and has a Board of Governors consisting of 8 local residents. The Ministry of Education provides the Board with an unconditional grant of \$100,000.00 per annum which is largely used to cover the high cost of maintaining the facility.

It is expected that the Centre will offer adult education programs to meet the unique needs of the local people through the avenue of a relationship with Northern College of Applied Arts and Technology which is the community college responsible for this section of Ontario.

Curriculum Developments for Native People

It was recognized that Native people wanted a greater involvement of the Ministry of Education in Native education. The response of the Ministry is in various degrees of completion, but positive action has been initiated.

1. A curriculum resource guide for the Primary-Junior Divisions on People of Native Ancestry was officially released in February, 1975 and distributed and implemented in many elementary schools in Ontario.
2. A curriculum resource guide for the Intermediate Division on People of Native Ancestry was officially released on October 27, 1977 and distributed to all schools in Ontario.
3. The Department of Indian Affairs and Northern Development (D.I.A.N.D.) agreed to share the costs in printing each of the above resource guides with the Ministry.
4. A committee to develop a curriculum guideline for Grades 9-13 on People of Native Ancestry was established in November, 1977. It is to complete its work by September, 1978. Half of the committee are Native people, as was the case with the previous resource guides.
5. The Ministry has funded the development of resource materials to support the resource guides either directly through its Curriculum Branch or through the Learning Materials Development Plan.

Since their establishment in the mid-1960's, a basic principle has been that Regional Offices exist to serve the unique needs of their regions. In subsequent reorganizations recognition has been given to the fact that needs of northern schools differ from those in most of southern Ontario. There are Boards in Northeastern, Midnorthern, and Northwestern regions that, because of their size and resources, require very little direct assistance, but the majority of Boards do. Regional Offices provide the mechanism for the implementation of Ministry policies and provide additional services to boards that are not able to provide a full range of programs. Each regional office has a degree of flexibility and autonomy to function effectively.

Procedures To Establish A New Board

A need for education facilities or for transportation to established schools is stated by:

- (a) residents in unorganized areas (Sturgeon Lake, Slate Falls)
- (b) government agencies or M.P.P.'s (Summer Beaver - native community - break away from a reserve)
- (c) industry about to build a community (Dent)

The Regional Office recommends (to the Minister) the establishment of a school district, does the work required to ensure that a board is elected and advises the board about staffing, a building proposal, etc. A Regional Office supervisory officer is assigned to oversee all aspects of the program. Overseeing often involves actually doing things that would be the responsibility of the board if the board were in a larger centre.

Where the Ministry of Education provides funding and services, the same approach is used in isolated school boards south of the 50th parallel, whether the pupils are native, or non-native.

Financial constraints make it impossible to meet all needs within a region. Regional offices provide a means of making maximum use of available resources through sharing arrangements with other offices, boards or agencies whose services complement the educational process.

...progress...

Examples of activities coordinated by regional office personnel include the following:

- . organization of a Regional Education Council of Directors of Education to co-ordinate matters of mutual interest
- . cooperation with boards in exchanges or secondment of personnel. Types of agreements include exchanges between regional offices, between a regional office and a board, and between boards
- . Red Lake Board given special permission to hire a Director of Education in spite of having fewer than 2000 pupils (normal policy minimum#)
- . provision of psychological services (Sudbury Psychological Unit)
- . implementation of Ministry curriculum policy
- . evaluation of programs through regional and Provincial reviews
- . support of community school programs

- . operation of Education Resource Centres (Sudbury and Thunder Bay) provide for
 - film distribution
 - professional library
 - videotape service
- . consultative services on use of the above
- . provision of direct services to assist in preparation of locally-useful curriculum materials
- . provision of supervisory services to boards without supervisory officers
- . circulation of research findings
 - ...future possibilities...
- . allow outside recruitment for replacements of the staff retiring this year and next, from teachers with northern experience
- . provide additional Francophone staff, possibly in the areas of primary, social studies, language arts and psychological services
- . expand direct services to boards outside of the main population centres

(A) The Financing Of Native Education In
The Province Of Ontario

The education of Registered Indian children is a responsibility of the Federal Government.

The financing of these educational programs falls in three main categories.

1. Native families who reside in School Board areas are dealt with in the same way as residents of the Province of Ontario. As residents of Ontario they pay property taxes to local municipalities and send their children to local schools, just as any other provincial resident. These Native students are the responsibility of the School Board, and are subject to all Provincial education requirements in accordance with The Education Act, 1974.
2. Native families (Registered Indians) living on Indian Reserves or in unorganized territory outside School Board areas are the responsibility of the Federal Government.

Where there is a population on a Reserve that is large enough to justify it, the Department of Indian Affairs normally builds and administers an elementary school (Kindergarten to Grade 8). While the Department of Indian Affairs totally finances the elementary education in these Reserve schools, it attempts to follow an education curriculum parallel to the elementary curriculum advocated by the Provincial Government.

Another option being introduced by the Department of Indian Affairs is to provide the Band Council with operating funds and allow it to run a Private School for all the pupils in the Band or to purchase its education from an adjacent Board.

On Moose Factory Island, the School Board is unique - a provincial School Board sponsored by the Department of Indian Affairs, which is responsible for capital costs and half of the operating costs: the Ministry pays the other half of operating costs and is responsible for supervision of the program and administration.

3. Many Native students at both the elementary and the secondary levels of education, who live on Reserves, obtain their education at regular provincial schools administered by local School Boards. This occurs for most secondary school students and some elementary school students where elementary schools are not provided on Reserves by the Department of Indian Affairs.

In all cases where Native students who live on Reserves attend local provincial schools, a Tuition Agreement is reached between the local School Board and the Department of Indian Affairs. In some cases the Tuition Agreements are also signed by the Band Councils to signify their endorsement of the agreements.

The Tuition Agreements between the local school boards and the Department of Indian Affairs spell out in detail the funding arrangements and other educational concerns of the parties.

In these Agreements the Department of Indian Affairs agrees to pay to the local School Board the total cost of educating all Native students in attendance at the school.

While there are a few isolated cases in the Province where one of the three procedures outlined above has minor modifications, it is felt that the above descriptions adequately outline the financing of Native education in the Province of Ontario.

5. (B) Ministry of Education Financing

Capital Projects

Section 146 of The Education Act, 1974, places responsibility on School Boards to build, operate and maintain the schools in their jurisdiction.

1. School Boards use demographic and other data to indicate need for new school facilities.
2. They send a prioritized list to their Ministry of Education Regional Office each year by October 31.
3. The Regional staff analyzes each project, places it on a Regional priorities list, and submits all documents to Central Office, with recommendations, by December.
4. Central Office studies and compiles all Regional Lists, and prepares a suggested capital program, based upon Provincial priorities and the amount of money available. This is finished by January 15.
5. An Allocation Committee (with representatives from each Regional Office) reviews this over 2 - 3 days, and sets up a final capital program.
6. This is then forwarded for review and approval successively by the Assistant Deputy Minister, the Deputy Minister, and then the Minister of Education.
7. Upon approval of the capital program, Boards are informed by their Regional Offices which projects will receive what amounts, in which fiscal year.

8. The next step is a formal building proposal application. The data required for such includes enrolment projections, a cooperative study of need, the program to be offered, the accommodation required, and its estimated cost. The cooperative study includes a list of the schools in the municipality, the Ministry of Education capacity rating of all permanent accommodation, a statement with reference to students living in the review area and not presently attending schools in the area, a list by housing-type of the new housing units actually under construction and not occupied, with appropriate yield factors to be used to develop the number of students expected, and other demographic data. This application is then submitted to the Chief Executive Officer of the Separate School Board, or in case the application is being made by the Separate School Board, to the Chief Executive Officer of the public School Board, and they both sign this document before it is submitted to the Regional Office. A small-scale map is attached showing the location of all schools in the area, the distance between them, and any major barriers to easy access.

9. The Regional Office checks and confirms that the statement of need is accurate, and, if satisfied issues building proposal approval.

"EVERY PROJECT TO BE APPROVED FOR GRANT PURPOSES MUST HAVE A CAPITAL ALLOCATION".

10. The School Board, upon receipt of building proposal approval, can then proceed to retain architectural and engineering consultants, and proceed with the planning of its new or additional facilities. Once the sketch plans are satisfactory

to the school board staff, they must be presented to the board and formally accepted by resolution by the board. Then an application for sketch plan approval is made to the Central Office of the Ministry of Education. Accompanying the sketch plan documents must be an estimate of the cost of the building.

11. The architectural approval section of the Ministry reviews the documents submitted and checks that the facilities offered meet the outline of the requirements prepared by the School Board and approved by the Regional Office. Assuming that the facilities are thought to be satisfactory and the estimate is within the capital allocation, sketch plan approval is issued to the School Board, with a copy to the Regional Office.

12. The Board hires an architect to prepare complete working drawings and a cost estimate which then require additional Ministry approval.

13. Tenders are then called and financing is arranged.

Operating Costs

1. In January the Ministry of Education calls upon School Boards to prepare Budgets for that Calendar Year, based upon Grant Regulations released earlier. These Budgets are due in March.

2. School Boards receive ADVANCES for January, February, and March based upon the previous year Budget.

3. Remaining months' funding is based upon the Calendar Year Budget figures.

4. Funding in four categories:
 - Ordinary Expenditures
 - Extraordinary Expenditures - (Cover items which do not have a similar impact on all School Boards). For example - Busing costs, construction done out of 1 mill assessment, debenture debt, etc.
 - Cost of Education of pupils enrolled under Ministry of Education special provisions, i.e. Ministry pays School Boards for education of: wards of Children's Aid and occupants of Mental Health Facilities, Juvenile Homes, etc.
 - Ancillary Grants - i.e. Community School Development Grants, Grants to Isolate Boards, Grants for lodging and transport of pupils living away from home.

5. The School Board accounts are usually audited and settled approximately four months after the Calendar Year ends.

Expenditures are calculated as follows:

For School Boards other than Isolate Boards and those
on tax-exempt lands -

Grants are related to (A) Board Equalized Assessment
per pupil

compared with (B) Provincial Equalized Assessment
per pupil.

Given a Provincial decision to fund a total of 60% of
the costs, if $\frac{A}{B}$ equals 1 for some Board then the Board would get
60% of its Recognized* Ordinary Expenditure from the Province,
with the rest raised locally.

If $\frac{A}{B}$ equals .5 for a Less wealthy Board then the Board
would get 60%
plus .5 X remaining 40%
hence receiving 80% of its Recognized* Ordinary Expenditure
from the Province.

7. Extraordinary Expenditure Grants are calculated in a
similar way based on a higher provincial share.

8. For Isolate Boards: the Ministry of Education pays that
amount of Recognized* Expenditures over and above the amount
collected by the Board on the basis of eight equalized mills of
assessment.

9. Boards on Tax-Exempt Lands: (Ministry does not pay
capital costs)

a) Hydro: Ministry pays 50% of costs,

b) Schools in Sanatoriums, Hospitals, etc.: Ministry pays 80%
of costs,

c) Canadian Forces Bases: Ministry pays 80% of teacher salaries,
50% of other costs.

*Those accepted as justifiable for educational needs.

UNSETTLED ISSUES

1. Should we be educating the pupils for a life at Small Northern Lake, or for a life in Canada/the world? Is it possible to do both?

Often the issue of curriculum irrelevance is raised in Northern Ontario. Some things being taught in the classes are not relevant to northern life. Parents are unhappy about an education system that draws their children away. Yet local opportunities are often non-existent or very limited.

If one should try to meet both needs - local focus and Canada-wide: then which items of the existing curriculum can be cut? Would these cuts not disadvantage northern pupils seeking jobs or further education elsewhere?

2. Education is one key element in transmitting cultural traditions.

The differences of Public vs Roman Catholic or of English vs French are all rooted in a common European cultural tradition.

What do we do in the case where a European cultural tradition is being transmitted to members of a Non-European culture? We blame the Education system, or we blame the Indian pupils for "failing"

Among the solutions being offered, we are training Indians to be teachers, and preparing courses of Native Studies.

3. Yet are we sensitive to the fact that all Indian tribes are not alike? A Cree teacher for Ojibway pupils or a Six Nations one for Algonquin pupils could be just as inappropriate as an English teacher faced with teaching French pupils.

4. According to Ministry of Education policy some local tax support of schools is a fundamental premise. This assumes that the people own land. This concept is completely foreign to the Native culture. Hence some accommodation has to be worked out.

5. How is the Ministry of Education to deal with uncontrolled settlements? These require capital expenditures for new schools, and costly investments of Regional Office support staff time. At the same time, often the people that have moved to a new location leave an older school empty or half-empty.

The Province might decide to restrict population settlement in the future - would that be a legitimate exercise of its powers?

Would the Ministry of Education be justified in refusing to provide services to such communities, given its mandate and responsibilities for providing education in the Province?

Yet is it justified in making high per pupil expenditures to serve such instances when this is done at the expense of less costly services possible elsewhere in the Province?

6. Given choice, the Ministry of Education would favor resources development decisions that locate workers in existing communities where existing school facilities may be used.

In any case, it would be highly desirable to have one or two years' advance notice of major projects which would put a load on the education system.

7. If a pipeline were located north of The 50° Parallel, it would probably require various depots for maintenance. These would tend to be very small communities if set up by themselves. Hence they would certainly create costly servicing requirements unless they were planned from the outset to be located in existing communities or with easy access to nearby ones.

8. The James Bay Lowlands Secondary School Board at Moosonee was established to serve that area. Indian Affairs, however, still pays for some pupils to go south for their education. This has the direct effect of lowering enrolments and raising per pupil costs at Moosonee, where the Board would like to extend its classes to Gr. 12 in 1978-79, and to Gr. 13 in 1979-80.

Another high-cost factor at Moosonee is the necessity to set up residence facilities for Moose Factory pupils at freeze-up and break-up time. Every effort is made to put pupils in private homes for these periods. About 30% of them are accommodated this way. The rest must live in dormitories, which are very difficult to manage, very costly, and disliked by many Indian families. Recently a helicopter service has been established (expensive) to take the pupils home on Friday nights and return them on Mondays.

Hence a road to Moosonee and a bridge to Moose Factory - projects discussed for many years - would have a favorable effect on cutting education costs.

The ideas discussed in this chapter have moved from general issues to more specific examples of some of the problems facing the education system north of the 50th Parallel.

Solutions are still being sought out of the daily experience of the many parties having to deal with these issues.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY
ONTARIO SOCIETY FOR ENVIRONMENTAL
MANAGEMENT

PRESENTED AT
TORONTO, ONTARIO
ON
DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO SOCIETY FOR ENVIRONMENTAL
MANAGEMENT
44 CONESTOGO ROAD WEST
WATERLOO, ONTARIO
N2L 4E2

PRESENTED AT

TORONTO, ONTARIO

ON
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ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
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No. 207

Royal Commission on the
Northern Environment

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this 16 day of Dec 1977

S. G. ...

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BRIEF TO
THE ROYAL COMMISSION ON THE
NORTHERN ENVIRONMENT

presented by
the Ontario Society for Environmental Management

December 16, 1977

INTRODUCTION

In this presentation to the Hartt Commission we wish to raise some issues and express our concerns as a professional association with the process of the Commission, the procedures it will follow, and the approach it will take rather than address specific substantive issues with respect to the Northern Environment.¹ This is consistent with our view that the Commission will establish important precedents for large scale environmental investigations that will have significant import well beyond the geographic boundaries established for the Commission. In this brief we first outline the nature of our Society followed by some general concerns which we have about the evolution of the environmental impact assessment process in Ontario. Our interest in seeing northern development in the context of interdisciplinary wisdom requires special attention to institutions and groups capable of doing the job. We then address the scope and strategy of the Commission's work followed by a number of suggestions with regard to how we, as an association, may be able to assist the Commission in its work.

¹ Environment in this context follows the comprehensive definition outlined in the Mandate to the Hartt Commission.

PURPOSE, HISTORY AND NATURE OF THE SOCIETY

The Ontario Society for Environmental Management is an interdisciplinary association made up of individual scientists and professionals from a wide variety of disciplines, particularly the social, natural and engineering sciences and the design professions. It arose out of a perceived need for increased communication and cooperation among individuals with diverse backgrounds and experience in order to approach complex environmental management issues in a comprehensive rational manner. In the past, holistic or systems perspectives usually have been poorly presented, if ever, or lost in the special interest viewpoints. This may be a parallel concern of your Commission.

Informally, in 1975 a group of environmental scientists/planners from four Ontario Ministries, four universities and three environmental consulting firms began discussions on issues concerning interdisciplinary environmental management. After a number of such meetings it was perceived that an organization might be advantageous, as this new area of interdisciplinary knowledge evolves regarding:


1. standards of work quality in the applied environmental sciences,
2. educational needs and development,
3. public accountability,
4. certification,
5. ethics.

At the end of our first year as an association, we have a membership base of approximately one-hundred, with applications still being received. A copy of our constitution is appended to our brief.

GENERAL CONCERNS

Although your inquiry has not been set up under, and indeed is completely independent from the recently proclaimed Environmental Assessment Act, we believe that there are strong parallels between your work and specific environmental assessment of designated undertakings under the jurisdiction of the Act. We believe, therefore, that your work will influence future application of the Act.

This point is particularly important because the nature of the Assessment Act does not allow it to give clear guidelines as to what constitutes a complete or satisfactory methodology from which appropriate decisions can arise.



The United States experience would suggest that environmental impact assessment under the National Environmental Policy Act can lead to a quantity approach - i.e. either my stack of evidence is higher than your stack of evidence - or a single indicator - the cost/benefit analysis oversimplification. Both of these approaches the either - or option, have severe limitations in areas such as Northern Ontario where social/cultural considerations which are difficult to quantify are particularly important. This essentially means for Northern Ontario that money generated in Toronto or Ottawa (or from other capital cities) can hire the best professional expertise, while local units of government or local organizations are ill-equipped to present a coherent or credible case for alternatives. This inherent imbalance can be corrected easily by releasing funds to local agencies or groups for interdisciplinary evaluation of such reports; our experience

suggests 10% of the total report cost is sufficient for local evaluation.

We also are concerned that the legalistic principles set up for the Commission should be examined. Most legal practice is based upon determining historical fact not upon probable futures, and we hope that you will be able to develop new processes and approaches that will be more appropriate to a futuristic orientation where policies, strategies, scenarios, alternatives or options can be tested against some specific environmental quality criteria which are guided by specific environmental management principles, such as the concept of sustained yield.¹

For example, sustained yield of our wood resources confronts the harsh reality that no balance between growth and allowable cut is possible without an accurate inventory. If Armson² is correct that current Ontario forest inventory has overstated actual volumes by one-third, we are in serious trouble when we expect to increase our cut by more than 50% by the year 2020 (Armson, p.71). If Ontario "accepts" that forestry in the North is an extractive industry by not upgrading its inventory and management this "decision" has profound implications for the survival, indeed the cultural viability of many Northern communities. The implementation of such a decision, either deliberately or by simply taking no action, should be preceded by a candid and extensive public debate.

¹ c.f. Dorney, R.S. 1977. Planning for Environmental Quality in Canada: Perspectives for the Future. Theme Paper, C.I.P. Conf. June 27, 1977.

² Armson, K.A. 1976. Forest Management in Ontario. M.N.R., 172 pp.

We would like to stress, furthermore, the notion of the "expert witness". Although the major vision of any Commission is inherently interdisciplinary, experts who testify before Commissions have traditionally been qualified by their knowledge and experience in a particular area of expertise. We believe, therefore, that you will need to seek out individuals who have experience with integration of heterogeneous scientific, technical and perceptual information within a futuristic-oriented framework. Because of this dynamic and value-laden orientation, we believe that individuals must have the complete freedom to qualify or explain their remarks, unobstructed by the normal rules of cross-examination where specific questions can only be answered with minimal allowance for amplification.

Of course as the Commission will receive alternative judgements of fact, which are highly charged with value judgements, you may wish to summon independent, knowledgeable witnesses, not currently involved with the major developments in the North nor not necessarily residing in Ontario. For example, regarding the impact of capital intensive fishing equipment on Northern fisheries we would like to suggest you examine the Fisheries Adjustment Study done in Manitoba by Ray England and R. Peters (Manitoba Department of Mines, Resources and Environmental Management, FRED Project, 1971, 230 pp.). In this study better capitalization of the fishery industry failed to help the fisherman's income; the reasons are quite revealing - "southern" paradigms of efficiency, productivity and capital did not mesh with the work habits of the local Caucasian, Metis and Dene peoples. Other experiences in Labrador, Northern Quebec and Northern Manitoba also can be applicable to the issues in Northern Ontario but may require active solicitation by the Commission's staff.

The contrasting perceptions of "time" between residents of the North and urban South is important to the maintenance of viable Northern Communities, and is a psychological phenomenon often overlooked. For example, I remember the remarks of a CN conductor in 1970 on the train to Gillam, Manitoba when our Planning Graduates were visiting the Kettle Rapids Dam Project. When queried as to arrival time, he said, "I never look at my watch, once I leave Winnipeg". His recognition of the flexibility of time proved to be profound. For, the next day when we visited the Kettle Rapids Manitoba Hydro Project then under construction, one of the Hydro spokesmen complained that the local Dene labourers were unreliable, leaving the job after a few weeks or months, in spite of their "on-the-job" training. When the CN foreman at Gillam was asked the same question, he said that the Dene labour force was most reliable. Significantly, when Hydro was queried a second time by our group to better understand this remarkable difference between employee turnover, Hydro admitted that turnover in the Caucasian labour force was equally high. The "southern" imposed 6 day work week and the 10 to 12 hour day regimen of Hydro's as opposed to the CN's more flexible one probably accounted for the difference in turnover. The southern promoter or project proponent should recognize and be sensitive to the perception of time when projects are built and industries are operated in the North. Analogously, space may be similarly different, although planners accustomed to urban development in the south still lay out towns as if they were in the south, and still build California ranch homes in the north.

INSTITUTIONAL CONCERNS

In Southern Ontario a rich assemblage of multi-disciplinary groups can be found in the private consulting sector and in universities as well as among units in Government. Such institutional and professional maturity is lacking in the Northern area under study, fundamentally for economic and historic reasons. The "suitcase" expert is all too common, flying in for a few days to look around; he then returns home to write a report in comfortable Toronto office surroundings.

To counterbalance, indeed to counteract this "fugitive expert", there is a need to create an interdisciplinary Institute or Foundation for Northern Environmental Studies, which would combine people who have lived in the North with those who have special knowledge or talent to offer to the North. However, we believe it would be intellectually or politically advantageous that it not be organized or funded by any one line Ministry, or be under the guidance of any single University: an open collaborative and semi-autonomous structure is desirable. A professional core group of 20 is probably a minimum "critical mass" with a support staff. Such a group could operate, at this time, on a \$750,000 to \$1,000,000 annual budget. Such minimal investment could, if properly managed, facilitate north-south communication, and serve the new Northern Ministry, Hydro, M.O.E., M.N.R., M.C.R., M.I.T., (and various Hearing Boards) as an independent body to evaluate dispassionately, single-purpose development schemes in a holistic way: cultural, economic and natural environment. Such an Institute also could serve as a repository for various northern documents. It could assemble, update and keep operational, environmental

data banks (computer operational) similar to the one being developed by Ontario Hydro south of the fiftieth parallel (at a scale of 1:250,000). Such a data bank would reduce costs whenever environmental assessments are required or reviewed; it could serve as well as a research tool, and it could be used to evaluate alternative policy strategies.

As an interim measure, a consortium of talent having the ability to work in an holistic environmental context (cultural-historic, abiotic, biotic, aesthetics, leisure pursuits, socio-economic) could be funded by the major primary industries and Crown Corporations in the North. If the money were given with no strings attached, it could serve as the nucleus for the Institute; it could recruit a staff, and offer advice to the private sector, public sector and local citizens. The attractive advantage is that it could be operational in 3 months, whereas an Institute would take 18 months to organize. The Canadian Arctic Resources Committee is the closest example we have to this concept.

THE COMMISSION'S WORK

It has been stated that you will not be making decisions with respect to individual projects, but rather your mandate is to establish policy, principles and guidelines for future development. We recognize this as the legitimate, pragmatic approach of a body such as yours which is advisory in nature. But we believe that you have an unmistakable responsibility to use your influence to see that a fair and comprehensive process of environmental assessment is followed for all major projects which proceed while your deliberations take place. We of OSEM are concerned that a number of projects both in the North and elsewhere in Ontario, have been exempted at this point in time from such a process. Such a trend must be reversed for the benefit of all Ontario residents.

We believe that you must first identify the ecological, cultural, social, economic, and engineering factors which must be considered in Northern assessments and recommend that these be applied to all new development projects in the North. Assessment of alternatives should include the separate impacts of the following steps (where applicable): acquisition, relocation, demolition, construction, occupancy, operation, abandonment. A program for monitoring should be specified. If this can be done quickly, the first assessments can serve as pilot projects for the Commission itself to review. In advocating such a sequential and analytical approach, we think that the impact of the Commission's work will be notable - if you can undertake this approach and evaluate the effectiveness of such an assessment approach for the pilot projects selected.



ROLE OF THE ONTARIO SOCIETY FOR ENVIRONMENTAL MANAGEMENT

The Ontario Society for Environmental Management is prepared to assist your Commission. We would suggest that our efforts might focus on the following:

- translate Commission concerns into detailed applied research or consulting projects which could then be contracted out by the Commission,
- provide review panels to assess results of research presented to the Commission,
- nominate individuals or panels to assist the Commission in its deliberations,
- assist in organizing an Institute for Northern Environmental Studies,
- convene seminars to discuss present and future policy options, and to discuss relevant environmental management principles applicable to Northern Ontario,
- propose the kind of environmental data systems to be developed,
- assist in reviewing environmental assessment guidelines and existing reports applicable to the large scale developments proposed in Northern Ontario. This could include workshops where Ontario work and similar work undertaken in James Bay and Northern Saskatchewan is reviewed from a methodological point of view as well as from a planning process and evaluation point of view.

Furthermore, we will, through our Public Presence Committee, be monitoring the impact of various projects in the North. We would therefore be able to comment to this Commission, or any other group so interested, on the quality of work done by the private and governmental sectors.

APPENDIX

CONSTITUTION OF THE ONTARIO

SOCIETY FOR ENVIRONMENTAL MANAGEMENT

CONSTITUTION AND BYLAWS FOR THE
ONTARIO SOCIETY FOR ENVIRONMENTAL MANAGEMENT (OSEM)

I PREAMBLE

Historically, single resource management professions such as forestry, soil science, wildlife and fisheries management evolved to manage land resources in relatively non-urban settings; resource management issues in urban and urbanizing environments received little attention. Similarly, legal, medical, engineering, design and socioeconomic interest in the natural resources aspects of urban and rural land use planning received little professional and academic attention. As the technological potential for the industrial societies increased, along with numbers of people, it was apparent that natural or rural landscapes could not remain untouched by various air-borne and water-borne pollutants, let alone untouched by the urban infrastructure such as gravel pits, highways and airports; a variety of external effects began to be identified. Hence it became important that dialogue between professionals be encouraged on all aspects of the man-nature interaction.

For these historic reasons, society's demands for scientific information and insights will be very different in the 1980's and beyond from what they have been in the past. The various scientific disciplines now most firmly ensconced in universities, government, the media, are single and jointly incapable of meeting the emerging land-use challenges of the 1980's without much wider dialogue with other professions and with the affected public.

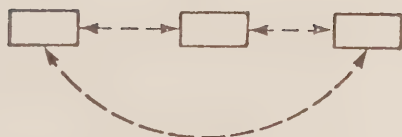
Fig. 1 Steps toward increasing cooperation and coordination in the education / innovation system.



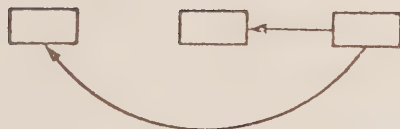
DISCIPLINARITY :
Specialization in isolation



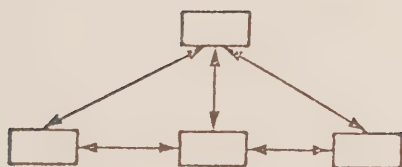
MULTIDISCIPLINARITY :
no cooperation



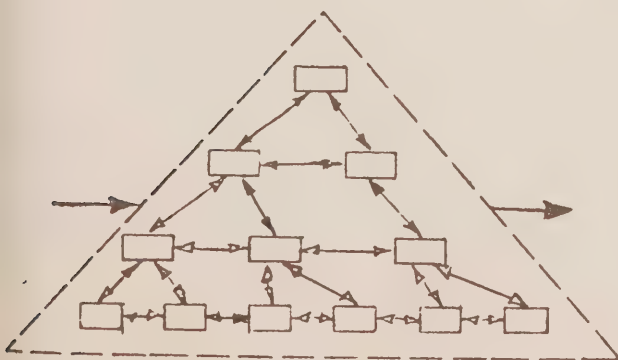
PLURIDISCIPLINARITY : cooperation
without coordination



CROSSDISCIPLINARITY : rigid polarization
toward specific monodisciplinary concept



INTERDISCIPLINARITY : coordination by
higher level concept



TRANSDISCIPLINARITY : multi-level
coordination of entire education / innovation
system

(From: Erich Jantsch, 1979, p. 490)

To meet these changing conditions, a broader definition of environment is required - a definition which is process-oriented and which will be useful to both natural and social scientists. The environment includes those factors which influence survival of the ecosystem as well as the physical, social and cultural survival of the individual and the community in an urban or non-urban setting.

On matters of environmental quality and renewable natural resources, Canadian society is now creating - or developing further - innovative planning and decision-making processes such as the environmental assessment review process, regional planning, urban planning, strategic planning, indicative land-use planning, direct public consultation, intergovernmental "reference groups", etc. These processes have become institutionalized through the creation of environmental schools or faculties, institutes at universities, major private institutes such as the International Institute of Applied Systems Analysis, international programs such as Man and the Biosphere of UNESCO, and private environmental consulting firms.

Such process and institutional innovations are often characterized as being "interdisciplinary" as defined in Figure 1 on the opposite page. Unless such attempts are quite explicitly based on one or more holistic perspectives, they are unlikely to rise above an ad hoc, ineffectual multidisciplinary. To be effective, interdisciplinary must pass the test that the contributions of different workers cannot readily be recognized as characteristic of the

separate disciplines; that the sum is greater than the parts that contribute to it.

The OAEM will strive toward the application of an integrated set of interdisciplinary concepts and processes that are appropriate for management, and provide the scientific basis for future work related to the ecological and human environment.

The following four perceptions are proposed as a starting point:

1. Nature is a system with some measure of self-regulatory capability that can be crippled to the eventual detriment of humans and other living organisms. Appropriate methods of systems analyses for planning, predictive and interpretive purposes may be applied to expose these systems properties. Existing systems perspectives in the conventional scientific disciplines need further development.
2. The reductionist approach has enabled man to design and construct highly complex systems, but is of limited value when applied to an understanding of the interrelationships between social and natural systems. Thus, techniques and approaches need to be developed which will improve prediction of the ecological significances of even individual changes. Man is faced with an environmental predicament which can be stated as follows: man's ability to modify the environment will increase faster than his ability to foresee the effects of his activities. This predicament rests not on man's lack of interest in his environment, but on his relative inability to understand complexly organized ecosystems, i.e., the environmental predicament rests ultimately on man's capacity rather than on his will.
3. Within the newly emerging modes of planning and decision-making, innovators are now specifying problems and challenges in general language that does not prejudice the relevance of particular disciplines, but does challenge dogmatic approaches. Planning and decision-making structures and processes are now more commonly interdisciplinary in essence and practice.

4. Stewardship, equity, reverence for life, accountability, respect for diversity, and other concepts are attracting renewed interest and commitment. They are congruent with a scientific systems perspective and can be made relevant within the emerging political institutions.

People with this kind of viewpoint - often not formulated explicitly - can be found scattered all through society and its various institutions and organizations. It is now time to consolidate these perspectives and competences into fully operational capabilities.

II OBJECTIVES OF THE SOCIETY

The Society is committed to two principles which will tend to set it apart from other professional organizations. First, it has as a prime objective the focus on developing and applying a holistic approach, including common language and methods for environmental planning and management within a systems framework. And second, its members are united by an explicit environmentally-oriented value position. These two principles are seen as providing the context for the Society's organizational objectives, namely: (1) to provide a focus for work of professional environmental scientists (natural and social) in this field; (2) to set standards of competence and quality in this field; (3) to encourage the interchange of technical information on matters of environmental management, through seminars, meetings, papers, etc. either with separate meetings or by joint meetings with other interested groups;

(4) to develop an interdisciplinary forum with other professions for exchange of information; (5) to assist government at all levels in making ecosystem decisions which will ensure that Ontario's natural resources are managed to sustain their long-term productivity and their functional integrity; (6) to inform citizens and government of the professional judgement of the Society on policy, and on management matters affecting ecosystem integrity; and (7) to recruit young people into the profession through appropriate university and public educational programmes.

This Society encourages joint membership, as well, with other learned and professional bodies so that interdisciplinary knowledge and expertise in matters of environmental management can be enhanced thereby. It is felt that by encouraging discussion, urban and rural landscapes and their resources can be more intelligently managed.

By specifically providing seats on the Council to non-Association members, public accountability and public visibility will be assured.

III NAME

The name of the organization shall be the Ontario Society for Environmental Management (OSEM).

IV DEFINITION OF ENVIRONMENTAL MANAGEMENT

"Environmental Management", for the purposes of this Society entails a professional interdisciplinary involvement in the development and practical application of knowledge within the environmental field. Consistent with the philosophy in the "Preamble", practitioners of environmental management, within this concept have in common a practical systems orientation.

While professionals in this sphere may be active in teaching, research, government, industry, or private practice, the major standard for full membership within this organization is a direct interdisciplinary involvement in the practical application of knowledge within the broad environmental management field.

This Society is intended to serve the needs of those professionals who are involved in the application of interdisciplinary approaches to environmental management, rather than those who do so with a unidisciplinary focus.

V CLASSES OF MEMBERS AND MEMBERSHIP REQUIREMENTS

The Society recognizes three criteria which prospective members shall fulfill. They are:

- I. Commitment to the objectives and the ethics of the Association, and also to the concepts expressed in the preamble to this constitution.

- II Academic requirements and,
- III Professional work experience.

There are four classes of members:

- A. Members (full)
- B. Provisional Members
- C. Student Members, and
- D. Honorary Members.

A. Members are those meeting all requirements for this class outlined below.

A commitment to the objectives and ethics of the Association and also to the concepts expressed in the Preamble to this Constitution.

The minimum academic and work requirements are either a Bachelor's degree and five years' full-time responsible professional experience or a Master's or Ph.D. and two years' full-time responsible professional experience (or equivalent) in the field. Those applying who do not have a Bachelor's Degree will be judged on merit, but as a guideline one-and-a-half to two years' full-time responsible professional work experience will be acceptable for each equivalent year of academic training. Also, the definition of an environmental management professional (Section IV of the Constitution) is relevant regarding work requirements.

Members will be either residents of Ontario, or Federal employees in the National Capital Region, or will be conducting their principal business or work in Ontario. All membership applications will be screened by the Membership Committee, and will require submission of a Vitae, and of reports, documents, reprints attesting to the professional ability of the applicant; supporting letters from colleagues familiar with the applicant's work and a personal interview may also be required by the Committee.

A member will be required to submit an Application For Membership at five year intervals, and will remain a member until his or her application has been dealt with by the Society in the same manner as a new applicant.

An applicant refused membership must be made aware of the Committee's reason for refusal after the procedures specified in the Bylaws have been followed, and can appeal the Committee's decision to the full Council, without prejudice.

B. Provisional Members are those who are qualified in every regard for full membership as outlined above except they do not have the required work experience. When the required years of experience have been attained, a Provisional Member must apply for full membership. They are non-voting members.

Application for Provisional Members, including rights to appeal, will be specified in the Bylaws.

C. Student Members are those registered full or part-time in a relevant Ontario academic programme. They are non-voting members. Upon completion of studies a student is no longer a member, but may apply for membership.

D. Honorary Members are those persons who are not presently members of the Association, and who have made outstanding contributions to ecosystem knowledge and management in Ontario. They may be nominated by any member for approval and are not required to pay dues. They are entitled to all privileges of full members.

Other classes of memberships such as Affiliate, Corporate and Institutional may be considered from time to time as the membership and Council see fit.

VI DUES AND INITIATION FEES

Dues and initiation fees will be set by Council and ratified by the members. Ratification will require a majority vote (mail ballot), of members returning ballots. The Bylaws will set forth specific operational criteria for voting.

VII SUBSCRIPTIONS

Subscriptions shall be open to all Association publications without membership requirements. Rates will be set by Council.

VIII OFFICERS

The Association shall have: a President, a Vice President, and a Secretary-Treasurer. They shall serve two-year terms, elected at the annual meeting, and be eligible for no more than two consecutive terms in the same office.

The President shall be responsible for nominating members for committees and any other special projects, subject to ratification by the Council. Staff, such as may be required, will be the responsibility of the Council.

IX COUNCIL

The Council shall have full executive authority; it shall be composed of the three officers, three chairpersons of the Standing Committees, the immediate past president, and three non-Society appointees. The Council members who are chairpersons of the Standing Committees shall be elected at the annual meeting and serve for a two-year term, staggered from that of the officers.

The non-Society appointees should be persons having a general interest in matters of environmental quality and environmental management. They will be appointed by a majority vote in Council for two-year terms as specified in the Bylaws. The President shall preside at all Council meetings and cast the deciding vote should there be a tie vote on any issue.

X QUORUM

A quorum for decisions of Council, for purposes of the Annual Meeting, and for mail ballots shall be defined in the Bylaws.

XI COMMITTEES

Standing Committees

The following committees shall be formed:

Committee on Ethics

Committee on Membership Approvals

Committee for Professional Development,
including liaison with interested
professional associations, institutes
and learned societies having related
interests.

Temporary Committees

Any committees deemed to be useful can be approved by Council and appointed by the President for a duration not exceeding that of the President's term.

XII ACTIVITIES OF THE SOCIETY

The Society shall engage in, but not be restricted to, the following activities:

1. Establish high standards of professional work,
2. Disseminate environmental management information to its members, to other professional and academic groups, to institutions, to industries, and to the general public,

3. Hold joint meetings and seminars with interested professional groups and any other associations or groups,
4. Hold annual meeting (separately or jointly with other groups),
5. Present opinions or briefs to legislative bodies, committees of government, regional or municipal councils and industries as may be appropriate,
6. Encourage universities and other centres, to provide competent training in the field of environmental management,
7. Encourage members to:
 - develop coherent concepts and methodologies for ecosystem planning, management and monitoring
 - participate in professional development activities
 - conduct research activities having general value to the association and to the profession.

XIII ETHICS

Membership in the Society represents an assurance of commitment by each member to the following ethical principles guiding professional practice in relation to human and non-human

Forms of life:

1. Responsibility to the Environment

The environmental professional recognizes and accepts a special responsibility to further the enhancement of the quality of biotic and abiotic environments within a systems framework. The environmental

professional will promote, foster, advance and lend his/her professional skills to activities consistent with this end; and will not consciously apply professional skills to activities that are detrimental to or destructive of the environment. As an individual, and collectively with fellow members, the environmental professional will press for action in environmental matters by decision-makers, both public and private; and, will encourage environmental planning to begin in the earliest possible stages of project conceptualization by every reasonable means.

2. Responsibility to Society

The environmental professional acknowledges and accepts a responsibility to society. While also recognizing a legitimate responsibility to a client or employer, the environmental professional will not make or support any recommendation concerning a project with which the environmental professional is involved and which s/he believes would be contrary to the public interest.

The environmental professional will encourage public participation, especially of those individuals and groups directly affected by a proposed action, from the beginning of projects in which s/he is involved. While recognizing the confidences of a client or employer, the environmental professional will actively seek full public disclosure of environmental information of projects with which s/he is involved.

3. Responsibility to the Profession

The environmental professional shall present a responsible image of the profession to the public. S/he will conduct him/herself towards other environmental professionals with good faith; and shall refrain from denigrating the work of other professionals for the purpose of obtaining work assignments. The environmental professional shall undertake only such work as s/he is competent to perform, and, where appropriate, shall retain and co-operate with other professional and technical staff; full credit shall be given by the environmental professional to all participants.

4. Responsibility toward Education

The environmental professional will promote and where appropriate contribute to the education and training of students in the field of environmental management; s/he will seek to facilitate the highest possible level of awareness of man-environment relationships among members of the public. The environmental professional recognizes the need for and will make every effort to pursue continuing education to maintain a relevant, high level of knowledge and skills.

XIV SUSPENSION OF MEMBERSHIP AND APPEALS

Upon majority recommendation of the Committee on Ethics, membership will be terminated. A member considered for termination will be notified and be asked to appear before the Committee if he or she so wishes. Before termination of membership, the member must be

notified in writing as to the reasons for termination. Any appeal of the Committee's findings shall be to Council who can, if they so desire, set aside by majority vote the Ethics Committee's ruling.

For non-payment of dues for one calendar year, membership shall be terminated automatically. Should reinstatement be requested within a two-year period, all back dues must be paid. After two years, the former member will have to reapply for membership.

XV AMENDMENT OF THE CONSTITUTION AND BYLAWS

Amendment of the Constitution and Bylaws will be by a two-thirds mail ballot for those returning a ballot for constitutional changes, and by a majority of those returning a ballot for Bylaws changes.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

FRONTIER COLLEGE

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

FRONTIER COLLEGE
31 JACKES AVENUE
TORONTO, ONTARIO
M4T 1E2

PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

SUBMISSION EXHIBIT NO. 208

NOTE:

A BROCHURE OF FRONTIER COLLEGE,
INCLUDED WITH THE SUBMISSION,
WAS NOT REPRODUCED, BUT CAN BE
VIEWED AT THE COMMISSION OFFICES,
55 BLOOR ST. WEST, SUITE 801,
TORONTO, ONTARIO.

Speech notes from Frontier College to the Royal Commission on Northern
Environment - December 16th, 1977

Mr. Commissioner:

It is a privilege to have this opportunity to introduce Frontier College to your Commission. We feel we have a considerable backlog of experience relevant to your tasks, and hope to bring this to your attention from time to time.

Today I will begin with a brief introduction to Frontier College.

Frontier College is a unique, 78 year old, non-profit, charitable agency which provides unstructured adult and community education programs in the outlying parts of Canada. The College has no religious or political affiliations and works with Canadians in all ten provinces and the territories. Frontier's clients consist of Old Canadians (our Native peoples), New Canadians (immigrants), and disadvantaged Canadians throughout the Canadian Frontier. On August 8th, 1977, Frontier College was honoured by UNESCO, with an Honourable Mention and a special medal for meritorious work and innovation in the field of adult literacy, the first such award to a Canadian organization.

Frontier College has two major types of programs. The first, and most prominent, is the labourer-teacher program. People are sent to remote locations where they are hired by a local company or agency. They live and work in mining towns, on railway crews, in fishing villages, and similar communities. Labourer-teachers work side by side with other workers and donate their free time and their talents to Frontier College to organize educational programs responsive to the needs and aspirations of their fellow-workers. Labourer-teachers receive no remuneration beyond the standard wage they are paid for their labouring job. The rewards for the work they perform in their free time lie in the service itself and in their own self-development. The roster of former Frontier College labourer-teachers contains many famous Canadians, including Norman Bethune, Dr. Benjamin Spock, Mr. M. C. Scrivener, Mr. Max Swerdlow, Mr. Roland Michener, and the Right Reverend James Mutchmor.

In addition to sending labourer-teachers throughout Canada, Frontier College has developed community education as a second major program. Field workers are hired by local community groups to provide adult education and community development expertise on a full-time basis. Funding is usually arranged through federal and provincial agencies via the community group. These placements are generally of one year duration, and team placements are the norm. Examples of this type of program include projects in: Elliot Lake, Ironbridge, and Dundas County, Ontario; Cox's Cove, Newfoundland; Igloolik, Northwest Territories; and Kelly Lake, British Columbia.

78 years experience, much of which has been in Northern Ontario, has taught the College a great deal about the problems and possibilities of working in such areas. We feel that it's important to share some of these perceptions with the Commission.

The terms of reference of the Commission are necessarily broad. It would be easier to treat this critical problem summarily, and it will be difficult to prevent your hearings from becoming a forum for simplistic analysis which might suggest that "the problem" is merely a question of development vs. non-development; native vs. non-native, or North vs. South. You and we must not allow this to happen. The real problem is much deeper, and month by month tensions grow as we avoid the real issues.

I would like to draw on the thoughts of two men who have considered the nature of the root of the problem carefully. The first is L.S. Stavrianos in his book "The Promise of the Coming Dark Age". He begins with this quote - "this is a time reminiscent of the last days of Rome and the ensuing Dark Age. This is a time of promise as well as peril - a time when fresh green shoots are sprouting everywhere amidst the ugly wreckage of obsolete institutions". The Chinese character for crisis is the amalgam of the characters for 'danger' and 'opportunity'. Stavrianos argues that we are so mesmerized by the danger ahead that we are ignoring the opportunity-half of this crisis in our society. His thesis is that within the North-American focus on self-actualization, on the development of the individual, there are 3 frontiers. "Whereas the first frontier was open land, and the 2nd industry and technology, this third frontier is one of individual and social change - the realization of personal and collective human potential." This new third frontier must be the focus of your Commission, because this enquiry is a microcosm of the problems of our society.

You must adjudicate the relative claims of two interest groups who ^{approximate} ~~represent~~ represent the first two frontiers. Native people state clearly and simply that their knowledge and culture is invested in the land - to deprive them of their land is to deprive them of their very being. Significantly, however, native people are not, by and large, anti-development, but rather searching for new models in the third frontier which provide for full realization of human potential.

Spokespersons from the second frontier, industry and technology, be they in corporations, government or small business, are gradually accepting that both the environment and humans have a limited capacity to cope with technology. Within the world of industry, there is a search for greater personal involvement and feedback - the assembly line is no longer enough. So industry is equally searching for the third frontier. Within this enquiry, it is critical that you not fall prey to the analysis that the first frontier be supplanted by the second. Because the time of the third frontier is nigh - for all of us. Northerners, Southerners, land-lovers and industrialists. The new way, and it is your task to assist all of us in realizing it, must utilize interdependent ways of relating - drawing out the best of both - and based on a moral position that allows individual self-determination for all of us as we engage the third frontier, that of individual and social change.

The second 'thinker' to whom I would like to refer, is yourself Justice Hartt. Your deliberations on the Law Reform Commission are an outstanding resource for this inquiry because you had the courage to delve to the roots of our problems. When you were introduced at a recent Symposium in Winnipeg, two maxims of a famous juror were noted:

1. Nothing should ever be done for the first time!
2. Nothing ever is done until everyone has been convinced of its necessity for so long, that it is time to move on again.

It was noted that your work was an outstanding exception -- and it is therefore important for us to encourage you to maintain your high standards -- Because this is not an abstract Royal Commission --- we will live the consequences of your deliberations. The challenge of your Commission is to have the courage to be first -- to lead our first faltering steps towards the 3rd frontier. Anything less has gruesome prospects -- the economic dilemmas that dominate much of our attention today will pale beside the lives that will be lost, underlived, and never lived, if you and we do not come to grips with the opportunity hidden in this crisis of our time.

To try and summarize the work of the Law Reform Commission to you is both impossible and unnecessary. However, your deliberations were and are critical, so I would like to note some of my highlights from your work.

1. You noted that although many of the symbols and ceremonies that go with the law have lost their credibility today, our society still cherishes the basic values of freedom and dignity -- respect for

one another as free moral beings.

2. In discussing the moral function of the law, you stated that the law cannot simply enforce dominant class values -- but must rather support societal values that will foster enough respect for one another -- that crimes will not be committed and that groups with different values and priorities can live together. With disturbing clarity, you demonstrated how the theory and practice of law are often radically divergent.

I see the dilemmas you faced with the law -- and the crisis and opportunity of this commission as parallel. Simple linear cause-effect analysis will not be good enough -- we need new choices. You stated ~~are~~^{but} new wisdom as follows:

"Public morality can be grounded in the minimal conditions for inter personal communication."

This Commission can begin to establish those minimum conditions -- and deal with both the inter dependency and the tension between legitimate aspirations for self-determination -- and the fact that it is no longer good enough to simply be dominant. The moral position of individuals is the key. I have high expectations that the wisdom and experience you bring to this Commission will result in creative new choices for all of us.

I have dwelt little with the direct experience of Frontier College, in Northern communities, with native peoples, in single industry towns, in camps, etc. This information is relevant to the Commission - but not at this stage. You have asked for comments and recommendations regarding

the scope and process for the hearings of this Commission. From our experience, and the thinking of Mr. Stavrianos and yourself, we recommend: (1) That this Commission provide for, and insist on, full and adequate participation of all major parties. This has a number of implications: (a) Hearings must be held, and resources provided for hearings in all native communities. Such hearings must be operated in a non-threatening manner, with adequate time and funds, so that native people can participate on their own terms. (b) Hearings must be held in Southern communities because the issue of development in Northern Ontario is only the leading edge of our own future. (c) Industry and government must participate fully in these hearings - regardless of other decision-making processes. (d) The public must be encouraged and given the opportunity to participate. Their futures are also at stake. It is also important to note that the non-participation of any of these groups, for whatever reasons, will emasculate the hearings of this Commission. Thus, full participation is requisite.

(2) That this Commission must provide for a full and adequate educational programme focused on these hearings. This should be as broad based as possible to engage all of Ontario's public in this critical discussion of their own future.

(3) That this Commission must ensure that the theory and practice of this enquiry are congruent. This means that there must be a moratorium on actions by all parties which will inalterably predetermine or undermine the possible recommendations of this Commission.

(4) That this Commission must endeavour - by engaging all publics at all levels as fully as possible in this enquiry, to ensure that this process of decision-making is a meaningful one which will not, and cannot be shelved. When so many Canadians have an outlook of unqualified gloom -

we cannot afford a sham involvement.

In closing, Sir, I would suggest that a maximum for this Commission, and it is the lines you quoted from Walt Whitman.

"Whatever degrades another degrades me, whatever is said or done, returns at last to me." If we can meet that standard we will reach the third frontier - with new choices for all of us.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

LAKEHEAD UNIVERSITY

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



Ontario

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

LAKEHEAD UNIVERSITY
THUNDER BAY
ONTARIO

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No. 209

Royal Commission on the
Northern Environment

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16 day of Dec 1977

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Lakehead University



PRELIMINARY STATEMENT

BY

LAKEHEAD UNIVERSITY
THUNDER BAY, ONTARIO

TO THE

ONTARIO ROYAL COMMISSION
ON THE NORTHERN ENVIRONMENT
DECEMBER, 1977

Introduction

Lakehead University has matured since its first inception (first degrees in 1965) into a post-secondary institution of approximately 3000 students with over 250 faculty offering undergraduate and graduate programs in both traditional and professional programs. Lakehead, the only University within the vast expanse of Northwestern Ontario, has accepted its challenge as a "regional" university with not only its outreach activities in continuing education but also with respect to the development of highly region-oriented on-campus programs.

We, as a university, like most of the North, are highly interested in your work and the eventual impact your recommendations may have on the development of Northern Ontario.

Some of our Activities

Over the years, Lakehead University has been involved in such ventures as:

i) Continuing Education

Degree credit courses have been offered at off-campus centres in a huge area defined by Moose Factory on James Bay in the Northeast, Little Current on Manitoulin Island in the Southeast, Rainy River in the Southwest and Big Trout Lake in the Northwest, encompassing some 200,000 square miles.

Courses have been given in such far north communities as Red Lake, Ear Falls, Sioux Lookout, Geraldton, Big Trout Lake (English) and Moose Factory (Mathematics via canoe). Although the University may require a minimum program enrolment, the Ministry of Colleges and Universities has recognized the problems (e.g. vast expanses of land, climatic conditions and sparse population) of servicing the Northwest and this is reflected in the provincial regulations regarding minimum enrolments (normally 8 students).

:

ii) Special Summer Program in Native Studies

During the past few years there have been an increasing number of confrontations between Native and Euro-Canadians. These confrontations have largely been the result of political and economic difference and poor cross-cultural communication. What one group sees clearly the other sees poorly or not at all.

The Lakehead University Native Studies Program attempts to bridge this cross-cultural gap through a frank exchange of ideas and opinions. Each summer a number of leading figures in the field of Native Studies are invited to speak to the

program participants. Their talks form the base of the program which consists of four half-courses in Anthropology at the third year level. Topics discussed include treaty obligations and special legal status of natives as guaranteed in the Indian Act (Canada), the art, literature, language and other culture specific forms of native expression. The problem areas of alcoholism, medical care, and issues re economic development are also discussed.

The format of the program is based on the immersion principle. Each day begins with a one and one half hour presentation by a featured speaker. This is followed by a question period centered around the morning topic. The afternoons are set aside for evaluating audio-visual materials and for further discussion in smaller groups.

The admission and registration requirements for this program are generally the same as they are for any other Lakehead University summer session course.

The Native Studies program first operated in 1976 and to date over 100 have completed the course.

iii) Native Teacher Education Program

The purpose of the Native Teacher Education Program is to increase the number of qualified Native teachers in Northwestern Ontario through an alternative program which will prepare teachers to meet the special social and cultural needs of the Native communities taking into account such factors as heritage and language. Native teachers who have an intimate understanding of Native traditions, psychology, way of life and language are best able to create the learning environment suited to the habits and interests of the Native child.

The program prepares teachers to provide courses that will assist the Native people to sustain their culture and language while at the same time teach the skills necessary to pursue further education if they so desire. In addition to educational methodology and theory, it includes courses in Native culture and traditions including such aspects as Native Languages, Native Arts and Crafts, Canadian Indian History and Native Worldview.

Persons of Native descent who are recommended by a Native organization, and who meet one of the following conditions may be admitted to the program:

- successful completion of any Ontario grade 13 program acceptable to the Univeristy as satisfying the entrance standards with an average of at least 60%.

- adult admission requirements: applicants who have not completed grade 13 are considered on an individual basis by the Native Education staff who consider each of the following factors: academic standing, fluency in a Native language, work experience and other courses completed.

Students who successfully complete the program are eligible for an Interim Elementary Teacher's Certificate, in line with their qualifications, valid for teaching in the elementary schools in Ontario.

The schedule of student teaching is an experimental one designed to give the students maximum exposure to teaching experiences in cross-cultural situations. Two weeks in the fall are done in Thunder Bay, three weeks in the winter on Reserves and two weeks in the spring in integrated out-of-city schools. An additional three weeks may be done in the second year to give the students a total of 17 weeks of student teaching.

Because of the nature of this program, a number of married students enrol and bring their families to live in Thunder Bay for the duration of the academic year. Special consideration is given to this situation particularly since the family will be making adjustments to an entirely new cultural and social environment. There are Native groups in the city who have as one objective the maintenance of the extended family and kinship systems prevalent on most Reserves. Such groups, together with the Native Education Program staff, assist the student teachers and their families to adjust to the urban environment.

The program was introduced in 1975/76 and to date 10 students have graduated from the program.

- iv) Our graduating Nursing students are provided with an opportunity to spend two weeks in a remote Nursing station as part of their instruction in Community Health.
- v) The development of region-oriented program such as Forestry, Outdoor Recreation, Geology and others.
- vi) As consulting advisors our faculty have been involved in such ventures as:

- Developing economic strategies for particular Northern settlements and resources.
 - Assisting native groups in developing their own timber harvesting and processing industry.
 - Participation with such professional societies as the Ontario Professional Foresters Association in briefing our Provincial MLA's on aspects of forest management in Ontario.
 - Participation in orientation lectures to Ontario Provincial Police with respect to Native studies.
- vii) Many of our research activities are associated with the northern environment, its people and resources. To name but a few:
- Environmental impacts of pulp and paper and mining industries.
 - Production of fuel gas from wood and wood residues.
 - Silviculture, timber harvesting and forest management studies.

- Development of low technology (do-it-yourself) solar collectors (funded by Ontario Ministry of Northern Affairs).
- Socio-economic studies related to the delivery of goods and services to northern residents (including transportation, import substitution, delivery of government services, etc.).

As you can see from the above, Lakehead University has moved into many new and exciting fields and perhaps our ability to be innovative is reflected in our present healthy status as an institution.

Your Inquiry

There is much interest in and concern about your inquiry in the North. As an institution we would ask the Ontario Royal Commission on the Northern Environment:

- a) To identify to Lakehead University what additional roles it might play in the delivery of post-secondary education in the North.
- b) To consider the role our over 250 faculty could possibly play in advising your Commission on a variety of socio-economic, environmental and technical issues. Unlike a number of other "instant"

experts on Northern life, we as residents of the North accept its environment.

- c) To Commissioner Patrick Hartt, we invite you to formally visit Lakehead University and learn first hand of our activities and abilities.
- d) Finally, as Northerners, we would strongly recommend to the Commission that to the highest degree of practical limits, your resources be utilized in the North for the direct socio-economic benefits of its inhabitants.

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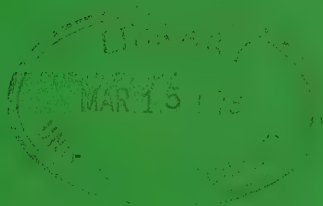
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ON

DECEMBER 16, 1977



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THE HON. MR. JUSTICE
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COMMISSIONER

SUBMISSION TO

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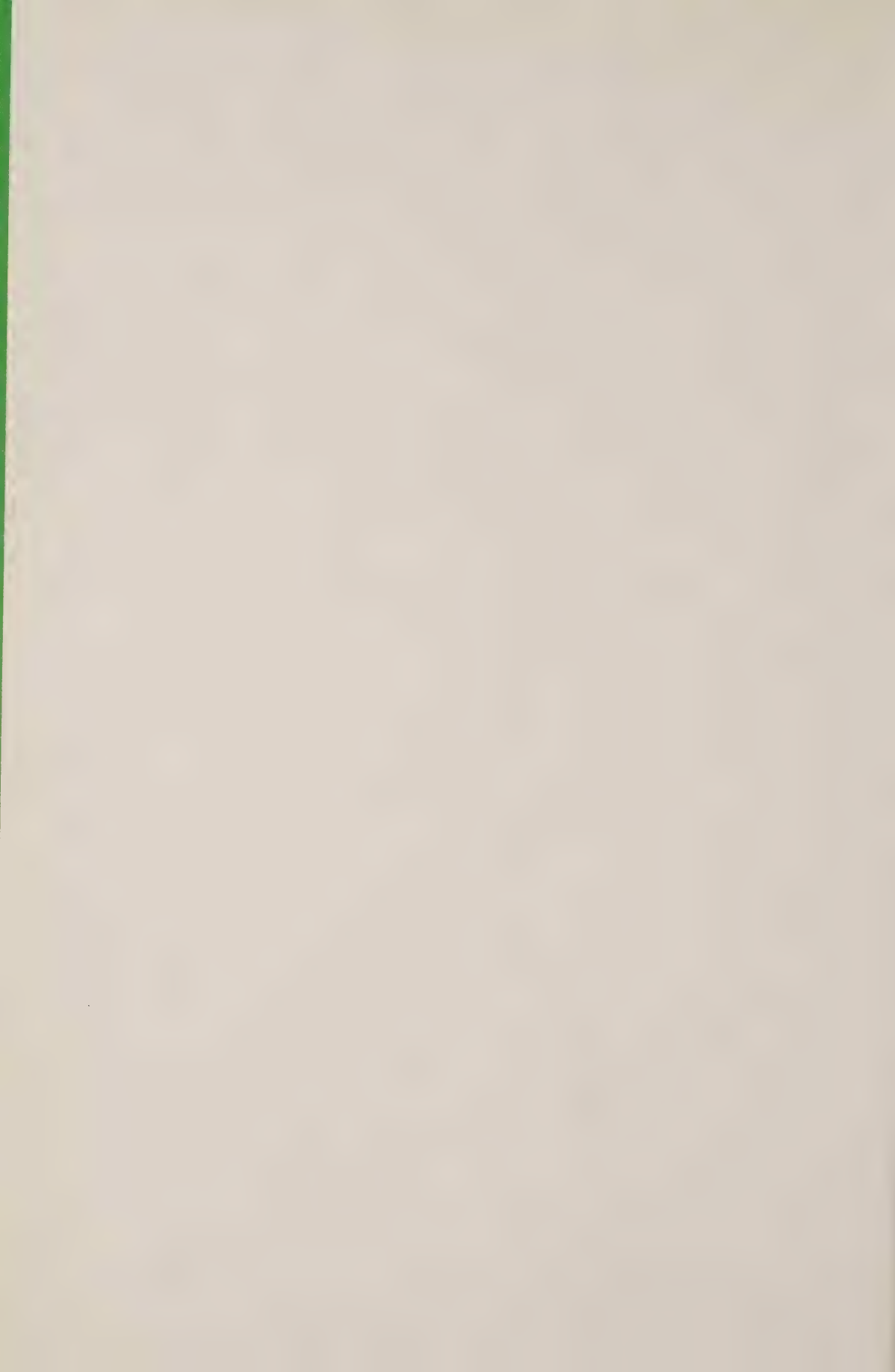
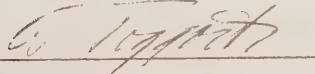


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I am a representative of the School of Experiential Education, an alternative high school in Etobicoke. We've been studying northern development issues in Gr. 13 courses such as Native Studies, Can. Geog., and Canadian Studies. One of the books studied was "The Politics of Development" by H. V. Nelles, which outlines the history of resource development in Ontario.

Nowhere in that book did we find any mention of native people, as their views in the past have been considered irrelevant (if considered at all) by government and big business, which have often acted as one entity.

We know that is changing, but there are still many areas of concern. We are concerned about the dangerous effects uncontrolled development can have on the northern lands and people, and also concerned that the government might not be doing enough to force industries to conform to adequate conservation and pollution-control practices. Our concerns by themselves will not change anything, and realizing that some development is inevitable in the North, we must advocate that everyone affected by resource development decisions should have a say in the matter. Our natural inclination was to wish that native people's views on development should have definite priority over non-native views, since this development directly affects their everyday lives. However, realizing that indirectly, development affects the lives of all the residents of Ontario, we believe decisions should not only involve native people, but also the non-native residents of northern Ontario, and ultimately the people of Southern Ontario.

We are not sure what methods can be employed to ensure equal representation in the decisions, and we feel that it may become one of the Hartt Commission's roles to discover this.

The next most important thing is to see that everyone is well-informed enough to make the right decisions about the north.

Students from our school organized a conference on northern development issues for 150 other Etobicoke high school students in October, with northern industrialists, native people, scientists and other experts presenting differing views, and what we were immediately impressed with was the complexity of the matter. We learned a great deal, and despite the fact that we are the only school in the borough authorized by the Ministry to run Native Studies and Canadian studies courses, we had an enthusiastic response from other students and parents in the borough. A major complaint was that, in the existing structure of courses in a regular high school, these issues are rarely examined. We consider these issues so important to all future generations that we recommend courses be devised to examine the whole area of northern development and native issues.

That mass education program is the major concrete recommendation we can offer the Commission, and we recognize the Commission itself as being an important opportunity for this, if the few "bugs" in the publicizing procedure can be worked out. We wish you success, and we will be anxious to hear the outcome.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

ONTARIO MINISTRY OF ENERGY

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 15, 1977



Ontario

ROYAL COMMISSION
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ENVIRONMENT

THE HON. MR. JUSTICE
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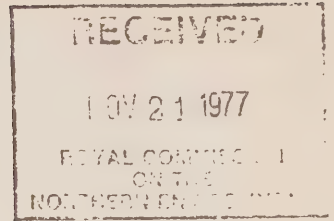
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO MINISTRY OF ENERGY
56 WELLESLEY STREET WEST
TORONTO, ONTARIO

PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 15, 1977



Ontario

Ministry of Energy

Submission
to the
Royal Commission on the
Northern Environment
Initial Hearings
November 1977

No. 211

Royal Commission on the
Northern Environment

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this 16 day of Dec. 1977
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Appendix I - Provincial Legislation Affecting Ontario Hydro

Appendix II - Examples of areas of Policy Coordination
and Guidance to Ontario Hydro

At the same time, the Ministry is taking action to help increase the supplies of energy developed within Ontario.

Indigenous sources of energy include uranium for generation of electricity in nuclear reactors, the relatively small pools of natural gas and crude oil in southwestern Ontario, hydro electric power (most of which has already been developed), lignite deposits, garbage and, of significance for the future, direct solar energy for heating and other renewable energy resources derived indirectly from solar energy, wind power and biomass (organic material), such as forest products and farm crops.

The economy and lifestyle of Ontario has been dependent upon abundant and relatively inexpensive supplies of energy. Assured energy supplies will continue to be essential if we are to maintain a high quality of life. However, the development and transportation of energy in Ontario must not proceed without careful attention to the social, environmental and economic implications. The Ministry takes all of these factors into account in developing energy policy.

To discharge its overall role, the Ministry of Energy consists of a small Ministry Office, located in Toronto, and three government agencies: the Ontario Energy Board, the Ontario Energy Corporation and Ontario Hydro.

The function of the Ministry Office is to provide support to the Minister of Energy in developing and effecting energy policies. Its staff includes policy advisors and analysts specializing in: the primary energy sources such as crude oil and petroleum products, natural gas, coal, uranium and electricity; energy conservation; renewable energy; energy technology; and legal and regulatory affairs relating to energy matters.

The Ontario Energy Board has two major functions. First, it is responsible for the regulation of the natural gas utilities which distribute gas to consumers within the Province. In this role, it is responsible for approving prices charged by the natural gas utilities, although the major components of recent price increases have been determined by the Federal Government. Second, the Ontario Energy Board serves as an advisory body with respect to the annual review of proposed changes in electricity rates by Ontario Hydro and with respect to any other energy policy matters referred to the Board by the Minister of Energy. For instance, the Board is currently conducting a thorough review of the principles of costing and pricing of electricity, which could lead to major changes in electricity rate structures.

The Ontario Energy Corporation is the vehicle through which the Province of Ontario invests in major energy projects. The Corporation also supervises the management of such invested funds.

Through the Ontario Energy Corporation, Ontario is investing over \$100 million in the Syncrude project to develop a major extraction plant in the Alberta oil sands. Ontario's involvement in Syncrude, including our investment of 5 per cent of the cost, has been a significant factor in the development of the Syncrude plant, which is expected to begin production of synthetic crude oil next spring.

The Ontario Energy Corporation's second major investment is in the Polar Gas project, which is examining the technical, social, economic and environmental feasibility of bringing natural gas from the Arctic Islands to southern Canada. This project is discussed in Section V of this submission.

Of course, the major energy supply agency of the Government of Ontario is Ontario Hydro. Since its establishment in 1906, Ontario Hydro has developed a large, integrated generating and transmission system which supplies dependable, relatively low-cost electric power to the majority of residents of Ontario. The overall policy within which Ontario Hydro operates is established by the provincial government and is communicated to Ontario Hydro primarily through the Minister of Energy. The Board of Directors of Ontario Hydro is, in turn, responsible for the implementation of such provincial policies, and for translating government policy concerning Hydro into corporate policy which gives direction to Hydro management.

Government/Hydro Relationship

Ontario Hydro, as a Crown-controlled corporation, is the Government of Ontario's agency for the generation and wholesale delivery of electric power in Ontario, and is governed principally by The Power Corporation Act. Ontario Hydro also sells electricity at retail to some 750,000 customers. Most retail power, however, is delivered by municipal utility commissions, which are governed by The Public Utilities Act and are subject to regulation by Ontario Hydro in such functions as rate-setting.

Ontario Hydro receives policy guidance from the Government, principally through the Minister of Energy, and requires formal Government approval for many of its activities. Ontario Hydro's Board of Directors is appointed by the Government.

Appendix I to this submission lists other Acts which constitute part of the formal, legislative policy framework within which Hydro in Ontario must operate. In addition, federal legislation applies: e.g., The National Energy Board Act provides for the regulation of interprovincial undertakings, including rates and delivery facilities, as well as of interconnections of and export of oil, gas, and electric power across the international boundary; The Atomic Energy Control

Act regulates works for the mining and production of uranium, the export of uranium, and the construction and operation of nuclear generating stations.

The formal mechanisms for Government policy direction to Ontario Hydro includes:

- Orders-in-Council from Cabinet;
- Cabinet policy directives;
- Statutory changes requiring approval by the Legislature.

Such formal policy direction to Ontario Hydro is generally transmitted through the Minister of Energy. Financial policy directives of wider application across the Government (e.g., Ontario Hydro borrowings within the context of total provincial borrowings), are communicated to Ontario Hydro by the Treasurer of Ontario.

Other communication channels with Ontario Hydro on policy issues include:

- Consultations at the ministerial level;
- Consultations at the deputy ministerial level;
- Consultations at the staff level, often involving staff of several ministries and agencies;
- Interministerial committee (e.g., Advisory Committee on Regional Development).

Appendix II to this submission lists areas of Government policy formulation and guidance affecting Ontario Hydro. Important contributions by way of policy advice and recommendations have been, or will be, provided by bodies such as:

- Royal Commission on Electric Power Planning;
- Select Committees of the Legislative Assembly;
- Ontario Municipal Electrical Association;
- Association of Municipal Electric Utilities;
- Association of Municipalities of Ontario;
- various Ontario industry associations in the field of energy;
- public interest groups.

Detailed information on the structure, responsibilities, and activities of the Ministry of Energy and its agencies is given in the Ministry of Energy's submission to the Royal Commission on Electric Power Planning, Part Two, Response to Question One (July 1976).

In addition to the province-wide aspects of its role, the Ministry of Energy recognizes specific policy concerns of significance in the area north of 50°. These issues and some of the provincial energy policies, programs and projects relevant to the area north of 50° are discussed in Section IV and V of this submission.

III. ENERGY ISSUES FACING ONTARIO

In April 1977, the Ministry of Energy published a report entitled Ontario's Energy Future, which identified the Province's immediate and long term energy prospects, and proposed a policy framework for addressing long range energy issues.

The report presented some hard facts which are worth repeating here. Eighty-five per cent of the energy currently used in Ontario is derived from the non-renewable fossil fuels (crude oil, natural gas, coal) and from uranium. All but a small proportion of the fossil fuels are obtained from outside the Province. Crude oil and natural gas, which together account for nearly two-thirds of our primary energy consumption, are currently purchased from the western provinces, principally Alberta. Almost all the coal used in the Province (about 15 per cent of primary energy consumption) is imported from the eastern United States. Only uranium is indigenous to Ontario, and it generated less than 6 per cent of the total primary energy consumed in 1976. Renewable sources, specifically hydraulic electricity, produced within the Province, contribute about 13 per cent of total primary energy; in addition, another 3 per cent is accounted for by purchases of electricity from outside the Province.

The current pattern of energy consumption reflects two types of dependency, which, together, place Ontario in a very vulnerable position with respect to future sources of energy supply. First, the Province is dependent upon external producers to meet the majority of its energy needs; second, crude oil and natural gas are non-renewable resources whose depletion must be offset through the development of alternative energy sources. Moreover, as sources of energy such as fossil fuels fall into short supply, their price in the marketplace will inevitably increase and non-producing provinces, regions, and countries will have to bear a heavier economic burden in order to satisfy their energy requirements. These occurrences are not mere conjectures: the sequence of events has already begun.

In summary, even assuming that new reserves are brought into production over the next five to ten years, shortages of domestically produced crude oil will occur in Canada by the early to mid 1980s and, without access to frontier supplies, shortages of natural gas will occur by the mid 1980s. Ontario, as a domestic "importer", will be forced to turn to foreign suppliers to meet a growing proportion of its energy needs, unless other more secure sources of energy can be developed.

The long range picture is even more ominous. The technology for alternative sources of energy, including renewables, is not yet either proven or economic. Therefore, in spite of the probable shortages in crude oil and natural gas, it is estimated that Ontario will have to rely on fossil fuels and uranium to support most of its energy requirements for the next fifty years. Throughout this same period, however, gradual transition toward a much greater reliance on renewable energy and other alternate energy sources must be made.

In the meantime, Ontario must encourage both energy conservation and the discovery, development and delivery of non-renewable energy resources to meet the energy needs of its growing population.

IV. ISSUES ASSOCIATED WITH ENERGY IN THE NORTH

In addition to the more general energy issues facing all Ontario, there are a number of broad issues associated with energy in the area north of 50°.

A. Energy Prices

The low density of population and the long distances between communities north of 50° contribute to high costs for many types of energy in that region. This situation is not unique to energy, of course.

Any commodity which must be transported long distances to the north and which does not benefit from economies of large scale transmission tends to have higher transportation costs. That applies in particular to oil and gasoline. Where electricity must be generated from diesel fuel, it too bears a higher cost both to the producer and to the customer.

Exceptions to this rule include communities in northern Ontario with access to natural gas from the TransCanada Pipeline System. Being closer to the producing regions, these communities benefit from lower natural gas prices than apply in southern Ontario. However, the Trans-Canada Pipeline System does not extend north of 50°.

A second exception occurs in communities served directly from the Ontario Hydro grid system. Residents of such communities pay electricity rates comparable to those charged in other Ontario communities receiving similar service.

A third exception, of course, is the use of energy sources indigenous to the north, principally including wood used for heating and cooking.

Nonetheless, for the reasons set out above, many communities or individual residents of the area north of 50° face prices for certain forms of energy which are considerably higher than those found in the major population centres of Ontario.

B. Energy Supply

A second issue concerns the link between economic development and supply of energy north of 50°. The energy supply arrangements set up to serve present communities in that area generally would not be adequate to support large increases in population or to fuel significant economic growth. For this reason, consideration of economic developments proposed for the area north of 50° should take into account the need for associated new energy supply arrangements.

C. Development of Indigenous Energy Sources

A third energy-related issue is that there are certain energy resources in the area north of the 50° (hydraulic, organic or biomass, lignite) with the potential to be developed to provide energy not only in the north but also to other parts of the Province. The costs and benefits of the development of such energy resources must be carefully assessed. The status of specific projects with which the Ministry of Energy is involved is discussed in Section V.

D. Transportation of Energy

A fourth energy-related issue in the area north of 50° involves the transportation or transmission of energy (e.g., natural gas, electricity) through the area north of 50° to the major population centres of the Province. Again, such projects would have potential benefits as well as costs, all of which must be assessed carefully before decisions are reached. The example of the proposed Polar Gas pipeline project is discussed in Section V.

V. CURRENT PROVINCIAL ENERGY POLICIES, PROGRAMS OR PROJECTS
RELEVANT TO THE AREA NORTH OF 50°

A. Electricity

Through Ontario Hydro, Ontario participates in programs to provide power in some northern communities which would not normally meet service criteria necessary to be served by the existing power system. There are three such programs -- the Indian Community Electrification Program, the Telecom Power Program and the Program for the Electrification of Remote Northern Communities.

1. The Indian Community Electrification Program

Under the terms of an agreement between Ontario Hydro and the federal Department of Indian and Northern Affairs, Ontario Hydro installs and operates central diesel generating systems and associated distribution facilities in certain remote Indian communities. The capital costs of equipment so installed are paid by the Department of Indian and Northern Affairs. Operating costs are paid by Ontario Hydro.

The first community to benefit by this program was Fort Albany, which began receiving power in 1972. Systems serving Big Trout Lake, Attawapiskat, Pikangikum and Sandy Lake have since been completed, and approximately 425 Indian homes are now being served. Weagamow and Lansdowne House are scheduled to receive power in 1977 and Winisk in 1978.

2. The Telecom Power Program

By virtue of an agreement between the Ministry of Transportation and Communications (MTC) and Bell Canada, telecommunications and telephone facilities are installed in certain remote Indian communities. In areas where no alternative power is available, Ontario Hydro supplies electricity for the facilities using

generators paid for and owned by MTC. The power from such installations is available only to the Bell Canada facilities.

3. The Program for the Electrification of Remote
Northern Communities

The Throne Speech of 1974 outlined the Government's intention to have electric power supplied to northern communities. In late 1975, a transmission line to Moosonee and Moose Factory was completed, at a cost of about \$6 million.

In April 1976, the Ministry of Energy became involved in a detailed study of the electrification of remote, northern, non-Indian communities. The Program for the Electrification of Remote Northern Communities evolved from the study, and was announced by the Minister of Energy in December 1976.

The Program is directed at remote, non-Indian communities having at least 25 year-round customers willing to purchase electric power from Ontario Hydro. The Province, through the Ministry of Northern Affairs, funds the capital cost of the selected supply option (diesel, line extension, hydro electric). Ontario Hydro installs and operates the required facilities, using revenues from customers in the communities and additional funds from the bulk power system to cover operating costs. Hillsport, Oba and Armstrong have already qualified for the program, and it appears that Collins, Auden, Biscotasing, Ramsay, Sultan, and Kormack may also qualify.

Ontario Hydro has taken over the existing system in Hillsport, and expects to have a new system in service by early 1978. Equipment for Oba has been designed, and the system is expected to be in service by early 1978. Supply arrangements for Armstrong are underway and a study to determine the

most desirable long term supply option for Sultan is due later this year. Collins, Auden and Biscotasing are presently scheduled for the 1978/79 fiscal year and Ramsay, Sultan and Kormack for 1979/80.

4. The Albany River - Hydro Electric Potential

In keeping with requests of Grand Council Treaty No. 9, as expressed to a meeting with the Ontario Cabinet and in a submission to the Royal Commission on Electric Power Planning (RCEPP), the Government has directed Ontario Hydro not to proceed with any plans to develop the Albany River's hydro electric potential.

In the Government response to the recommendations of the Select Committee Reviewing Ontario Hydro's Proposals to Increase Bulk Power Rates for 1976, the Minister of Energy stated that, pending the outcome of the RCEPP deliberations, there would be no development of the Albany River. Further, the Minister has directed Ontario Hydro that no on-site investigations of the Albany are to be undertaken until the RCEPP process has been completed.

This position may be re-assessed in light of any recommendations of RCEPP.

5. Potential for the Development of Small Hydraulic Sites

Northern and Northwestern Ontario abounds with fresh water lakes, rivulets, streams and rivers. Generally speaking, the waters in the vast area north of 50° run off towards James Bay and Hudson Bay.

The ultimate potential of these waters for hydraulic generation of electrical power on small to medium sites has not yet been assessed in a definitive way.

Modern turbine technology can provide small and highly efficient turbines in prefabricated generating stations, for use on sites with "low-head" (0 - 20 feet) to "medium-head" (21 - 40 feet and up) water flows.

This technology offers an option in providing electrical energy to northern communities which might be cheaper than diesel generators or line supply, and with environmental impacts which are easier to manage than for large-scale hydraulic developments. Moreover, small hydraulic sites represent a source of renewable energy which, as indicated earlier, will be key to Ontario's long term economic future.

The Ministry of Energy believes that, for sites with small or medium hydraulic potential, the application of small-scale technology holds promise and should be investigated.

On the other hand, the environmental effects of small hydraulic installations must be carefully considered, since small hydraulic sources of power are often more variable over time. Interference with the flow of a small river or stream may have a relatively strong impact on the immediate area compared to the case of a larger river. There are, as well, offsetting side-benefits: small-scale developments may open up opportunities -- at reasonable cost -- for constructive environmental projects such as fish hatcheries or waterfowl rearing. Cost/benefit calculation, therefore, cannot be based on consideration of electric power alone.

The Ministry of Energy has sought and obtained the cooperation and assistance of the Ministry of Natural Resources and of Ontario Hydro in updating the (1946) List of Water Powers in the Province of Ontario, many data in which pre-date 1946. The results of such updating will be made available to the Royal Commission on the Northern Environment.

In the development of small hydraulic sites, as with any other energy developments, the Government will ensure that the people living north of 50° are fully consulted.

6. Electrical Power System Expansion North of 50°

Apart from the large-scale hydraulic potential of sites on the rivers draining into Hudson Bay and James Bay (a potential which has not yet been fully and definitively assessed), there are some long-term future electrical energy developments north of 50° that can be conceptualized:

- 0 extensions north of 50° of electrical power transmission lines to hydraulic generation sites on large rivers or to a power plant near the lignite deposits of the Onakawana region, 60 miles southwest of Moosonee;
- 0 economic development proposals such as mines would require an assessment of new needs for delivery of electrical power.

An east-west national electrical power grid, a project now being studied under the auspices of the Interprovincial Advisory Council on Energy (IPACE), if it materializes, is unlikely to involve the location of high-voltage (500 kv) transmission lines north of 50°.

B. Natural Gas Supply

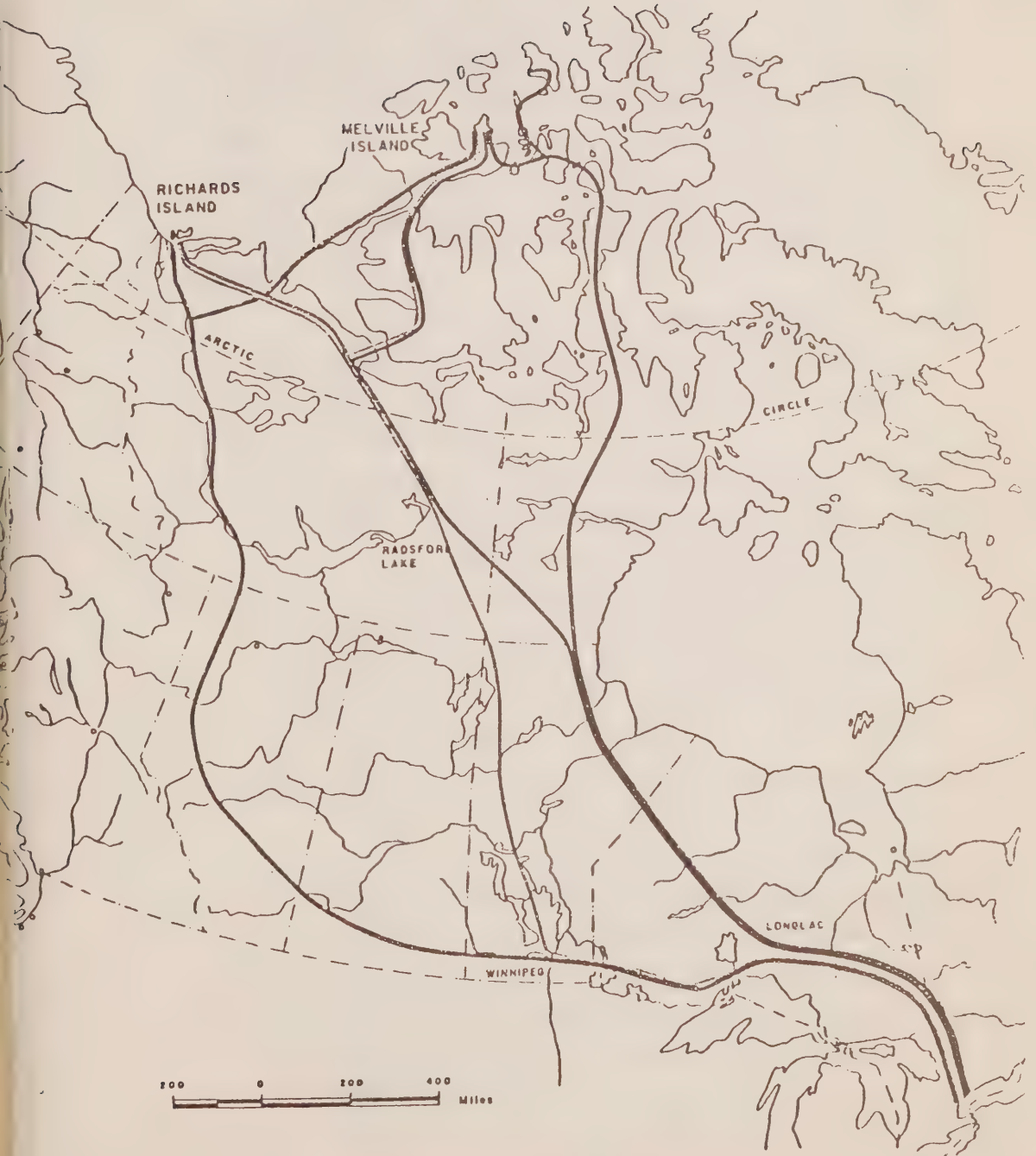
1. Development of Frontier Resources

Ontario consumes about 700 billion cubic feet of natural gas per year, about 46 per cent of Canada's total annual consumption. Current projections of the natural gas supply/demand situation indicate that supplies from established sources will fall short and frontier natural gas will be needed by the mid 1980s. Therefore, the Province has a vital interest in the

SUMMARY OF PIPELINE ROUTES

MAP 1
MILEAGE TO TORON

—————	3360
—————	3661
—————	4056
—————	4323
—————	4724



DATE : AUGUST 1977

development of frontier sources of natural gas to provide continuing supplies as the traditional western Canadian supplies run out.

At the present time, reserves in the proved and probable category are estimated at about 11 trillion cubic feet in the Arctic Islands and about 5 trillion cubic feet on land in the Mackenzie Delta region. Neither of these established reserves is sufficient to support a pipeline at the present time. However, exploration is continuing, and expectations are high that the necessary additions to reserves will be discovered.

Various options exist for bringing this gas to Canadian and, hence, potentially Ontario markets. These options, the first four of which are shown on Map 1, are as follows:

- i) the Dempster Highway 'lateral' hookup to the Alaska Highway Pipeline (yellow), which would bring Mackenzie Delta gas to Canadian markets;
- ii) a pipeline through the Mackenzie Valley connecting with the West Coast Transmission System and the Alberta Gas Trunk Line System to bring Mackenzie Delta gas to southern Canadian markets (green);
- iii) the Polar Gas Project which would bring Arctic Islands' gas into southern markets (black);
- iv) a 'Y-line' concept (blue and red) which would tap reserves in Mackenzie Delta/Beaufort Sea and the Arctic Islands, and then move this gas southward;
- v) a Liquid Natural Gas (LNG) Project which would bring Arctic Islands' natural gas to the east coast, and possibly Quebec, but is unlikely to supply Ontario;

- vi) the Quebec/Maritime pipeline, proposed by Alberta Gas Trunk Line (AGTL) and Petro Canada to expand, under certain conditions, the natural gas market in Quebec. This pipeline, if reversible, could move LNG derived natural gas (and possibly offshore gas) to Ontario, although frontier LNG would be an expensive source for Ontario.

Ontario must remain flexible with respect to all frontier natural gas sources. Some of these projects could be less advantageous to the Province than others in terms of security of supply and price. Hence, it has been, and will continue to be, in Ontario's best interest to support an objective examination of all options of transporting supplementary supplies of natural gas to our Province.

2. Polar Gas Project

The Polar Gas Project was formed in November 1972 to study the feasibility of transporting natural gas from the Arctic Islands to southern markets. The current members of the study group are:

TransCanada PipeLines Limited (Project Manager);
Panarctic Oils Limited;
Ontario Energy Corporation;
PetroCanada;
Tenneco Oil of Canada Limited;
Pacific Lighting Gas Development Company.

The Ontario Energy Corporation has participated since September 1975.

From the beginning, Polar Gas has examined alternative transportation systems, including liquid natural gas (LNG) tankers, as part of its research and feasibility studies. However, on the basis of results obtained to date, it has concluded that a pipeline represents the most efficient and economical means for reliable long-distance transportation of a large volume of natural gas from the Arctic Islands.

The plan currently preferred by the Polar Gas Project is to build a 42-inch diameter pipeline, located down the west side of Hudson Bay through Manitoba, connecting with the TransCanada PipeLines system at Longlac in Northwestern Ontario. The pipeline would be approximately 2,300 miles in length, and would have an initial throughput of 1.5 billion cubic feet per day, extending up to about 3.0 billion cubic feet per day at full capacity.

Work undertaken to date has confirmed the feasibility of Polar Gas' approaches to laying pipe across Arctic channels -- the most critical aspect of an Arctic Islands natural gas pipeline. In addition, engineering data has been gathered to support ongoing pipeline system design.

Field research efforts have also collected information required to establish prospective pipeline routes.

While further research in a number of areas is currently under way, Polar Gas is confident that, given adequate gas reserves, an Arctic Islands gas pipeline will be environmentally, technically and economically feasible.

The most recent estimate of natural gas discoveries to date by Panarctic and other companies operating in the Islands is about 11.0 trillion cubic feet. It is expected by these companies that a sustained exploration program will establish the minimum threshold reserves of 14 - 16 trillion cubic feet necessary to support the construction of a pipeline.

Polar Gas is proceeding to develop a proposal to put before federal regulatory authorities.

Provincial Involvement

In 1974, the Government of Ontario announced its support for the Polar Gas Project and its intention to negotiate an agreement to participate in the Project. The reason for this initiative involved Ontario's obvious interest in long term natural gas supplies and the fact that the selection of a route and mode of transportation could have important environmental, economic and social effects on the Province. Ontario's commitment is limited to the development of a proposal by Polar Gas to place before federal regulatory authorities and does not extend to involvement in construction of a pipeline, if approved.

Early in 1975, one of the participants in the Polar Gas Project withdrew, jeopardizing the Project at a time when keeping this alternative source of natural gas available was extremely important to Ontario. Consequently, in September 1975, approval was given for investment by the Ontario Energy Corporation in the Project.

It should be remembered that the Ontario Government has a long-standing policy to protect and secure potential sources of energy in the long-term interests of its residents. This policy is particularly relevant in view of the fact that today 80 per cent of Ontario's energy supplies come from outside the Province and the Ontario involvement with the Polar Gas Project should be viewed in this context.

The Government of Ontario considers Polar Gas one of the options available to the Province in securing supplies of increasingly scarce resources in the long term. Consequently, the Government views it essential that this project be supported through the research, development and application phases. In the longer run, should adequate alternative energy sources not be available, development of a transportation system for frontier supplies of natural gas will be vital for Ontario's continued strength as an industrial society.

Further, it has always been an important principle of the Ontario Government that, while the Province looks outside its boundaries for 80 per cent of the energy it uses, the Government seeks to ensure that steps are taken to assure Ontario consumers of future energy supplies, whatever the source. Long before the formation of the 1973 oil cartel, Ontario had developed long-term strategies to help meet its energy needs.

In the 1950's and early 1960's, Ontario supported the construction of pipelines to transport oil and natural gas from Western Canada to Ontario markets, even though at the time, in the case of crude oil, this was a more expensive solution than purchasing from foreign markets.

About the same time, the Ontario Government, through Ontario Hydro, participated with Atomic Energy of Canada Limited in the development of the CANDU nuclear system, a system recognized today as the safest and most efficient producer of nuclear energy in the world. Now, nuclear power accounts for 17 per cent of Ontario's electrical generating capacity and about 20 per cent of the energy delivered.

More recently, the Government has supported Ontario Hydro in securing the delivery of Western Canadian coal into the Ontario market. Once again, while the price of this coal is currently higher than that paid by Ontario Hydro for U.S. coal today, it is in our long-term interest to see this Canadian resource developed.

Similarly, Ontario has invested more than \$100 million in the Syncrude oil sands project in Alberta, through the Ontario Energy Corporation, to help extend Canada's supplies of oil. Ontario has also invested about \$10 million to date in the Polar Gas project.

All of these projects are tangible commitments by the Government to guarantee future delivery of fossil fuels, at reasonable prices, to Ontario markets.

The Government is confident that with these measures underway, Ontario's residential, commercial and industrial consumers will continue to have secure and reasonably-priced supplies of energy for years to come.

But it would be short-sighted not to recognize that those energy sources are finite and non-renewable. That is why the Ministry of Energy has recently undertaken important new steps to

promote energy conservation and awareness, and to assist, both technically and financially, in the development of renewable energy.

In summary, the Ontario Government has never lost sight of the critical need to participate in and to discuss energy projects within Canada. And while solar, wind energy and other renewable energy experiments being undertaken by the Government today may not yield immediate benefits, the Government knows, in the longer term, that the work, time and money invested in these today could well be the basis of dependable energy supplies in a few decades.

It should be emphasized that the Ministry regards the Polar Gas project as a potential means of providing future energy supplies for Ontario as our current sources of supply of natural gas and crude oil begin to run out, and to help fill the gap until renewable energy sources can play a major role.

It is well understood, however, that this Polar Gas project would have to be proceeded with in a way that would cause a minimum of disruption and disturbance to the way of life of those people who might live adjacent to it.

As the lead Ministry in organizing the Government's review of the Polar Gas project, the Ministry of Energy is seeking to ensure that all environmental and social concerns associated with the project in Ontario are addressed. The Ministry has the responsibility of coordinating the scope, role and timing of Ontario Government involvement and, through this process, to establish working relationships between Ontario Government Ministries and Polar Gas staff.

C. Coal (lignite)

The only known deposit of coal in Ontario consists of an estimated 190 million tons of lignite in the Onakawana region. The deposit, covering 8 square miles, is located 60 miles southwest of Moosonee and 125 miles north of Cochrane on the Ontario Northland Railway.

Realizing the benefits to be derived with respect to both energy supply and the positive economic effects on Northeastern Ontario, the Ministry of Energy has encouraged and supported current investigations into the potential uses and development of the Onakawana deposit, by both Ontario Hydro and the Ministry of Natural Resources.

Onakawana Development Limited is carrying out geotechnical and hydrological studies under a six-month exploratory Licence of Occupation from the Ministry of Natural Resources which expires February 1, 1978; a 21-year lease is being negotiated. In addition, an agreement is being negotiated between Ontario Hydro and the Shawinigan/Steag/Onakawana Development group for a joint study to determine the commercial viability of a proposed mine and power plant development.

The Ministry of Energy has also supported the Ministry of Natural Resources in its exploration efforts to determine the possible existence of additional coal deposits in the adjoining James Bay Lowlands region.

D. Renewable Energy Resources

The long-term significance of renewable energy resources in Ontario was outlined in Section III.

Relative to the rest of Ontario, the area of Ontario north of 50° presents certain unique opportunities and challenges for utilization of renewable energy resources. Direct solar, wind and biomass (organic) energy resources are well-suited to small-scale local point-of-use applications. However, although these resources are

widely available in the north, climatic and other conditions present special problems and challenges for their successful application.

1. Solar Energy

Solar radiation data are collected at Moosonee (51° 26 N) and at Kapuskasing (49° 25 N). An examination of this information, together with temperature records, leads to some interesting conclusions. Although over the year there is less solar radiation available in Moosonee than in Scarborough, during the winter, due to low cloud cover, there is an average of 10 per cent more radiation available in Moosonee. The significantly lower temperatures, however, create difficulties in efficiently collecting and storing this radiation. Current designs of flat plate solar collectors will not operate at all, or only very inefficiently, when the outside temperatures drop below -20°C (0°F). More expensive evacuated tube collectors will operate under these conditions, but with efficiencies only comparable to those of flat plate collectors operating in the warmer winter temperatures in southern Ontario. Because of the much higher heating loads required, solar systems in northern Ontario will have to be larger, with more expensive collectors, and, hence, will likely cost more than systems in southern Ontario.

The Ministry of Energy, in conjunction with other Ministries, is conducting a series of demonstration projects of solar space heating and hot water heating in different types of buildings, and the data being gathered from the design, tender, construction and operation of these buildings will be invaluable in moving the development of solar technology forward to the benefit of all parts of the Province.

2. Forest Biomass

a) Wood Waste Utilization

The resource having most immediate potential for contribution to energy supply in northern Ontario is forest biomass. Considerable quantities of wood wastes are not now utilized at a number of pulp and paper mills in the north and pose environmental problems in disposal. In addition, current forest harvesting techniques leave significant quantities of unmerchantable timber, tops and branches in the bush.

The harvesting of this material for economic energy production is a considerable challenge.

The production of electricity and steam from facilities fired by forest biomass or forest wastes would have advantages to the local area. In addition, through inter-connections to the Ontario Hydro grid, the power also could be utilized elsewhere. The economic viability of such schemes currently is being assessed.

The Ministry of Energy is one of five Ministries supporting a major design feasibility study for a facility in the Town of Hearst for co-generation of process steam and electricity.

There could be further opportunity for co-generation facilities in other communities with saw mills or pulp and paper operations, or in remote communities where a significant source of wood is available close at hand.

A further potential use of wood is for the production of electricity in areas remote from the grid by the use of wood gasifier-dual-fuel engine combinations. This type of unit was used extensively prior to the Second World War in mining operations in remote areas of the world, and although the power costs would be several times higher than the cost to purchase power from Ontario Hydro, it is the opinion of the Ministry of Energy that the cost could well be lower than the cost of power from diesel generators.

b. Synthetic Liquid Fuels

The Ministry of Energy is addressing the long-term potential for the production of synthetic liquid fuels, for example methanol, from indigenous resources including forest biomass. An Advisory Group has been established with participation from the Federal and Provincial Governments and from the petroleum and motor vehicle manufacturing industries to advise the Minister of Energy on the costs and benefits of developing a synthetic fuel production and utilization capability for Ontario, and of the next steps toward such development. The Advisory Group's report is expected early in 1978.

3. Wind Generation

The problems of supply of electrical power to remote communities and remote telecommunications facilities is one of great interest to the Ministry of Energy. In addition to studying the use of wood-gasifier dual-fuel engines, the Ministry is interested in the potential of wind-assisted diesel generation facilities for remote power supplies in northern Ontario -- an area which has the best wind energy potential in the Province.

The Ministry and the National Research Council are jointly conducting a project on Toronto Island to develop a prototype wind/diesel hybrid power system. This experiment, which commenced operation in October 1977, will last four months. Data will be gathered on the stability problems associated with direct coupling of the wind generator and the diesel by both electrical and mechanical means, and on the extent of fuel savings that can be achieved using the wind generator.

If this project is technically successful and can demonstrate sufficient fuel savings, it is anticipated that one or more units will be installed in 1978 in northern Ontario for powering remote facilities such as facilities related to transportation now operated by the Ministry of Northern Affairs or telecommunications sites.

E. Energy Conservation

Because of its small population, the area north of 50° does not consume a large quantity of energy relative to the rest of the Province. Nevertheless, conservation of energy is of at least as great significance in that region as elsewhere.

The urgent need to reduce unnecessary use of energy is underlined by several major factors, including the economic health of Ontario, environmental considerations, the need to extend the life of resources of oil and natural gas, the high cost of capital investment in new energy supply projects, and the overall prospects of energy availability.

The Government of Ontario is a leader in Canada in the conservation and efficient use of energy, with each Ministry playing a role in its own area of responsibility.

Among other major conservation initiatives, the Ontario Building Code will be modified to incorporate some of the increased insulation levels for new residential and commercial construction proposed in the draft Code for Energy Conservation in New Buildings prepared by the National Research Council.

PROVINCIAL LEGISLATION AFFECTING ONTARIO HYDRO

MINISTERIAL RESPONSIBILITY

LEGISLATION

Environment

- Environmental Assessment Act
- Environmental Protection Act
- Ontario Water Resources Act
- Pesticides

Natural Resources

- Lakes and Rivers Improvement Act
- Conservation Authorities Act
- Public Lands Act
- Beds of Navigable Waters Act
- Provincial Parks Act
- Niagara Parks Act
- Crown Timber Act
- Beach Protection Act
- Mining Act

Treasury, Economics &
Intergovernmental Affairs

- Financial Administration Act
- Local Improvement Act
- Municipal Act
- Municipal Affairs Act
- Municipal Franchises Act
- Public Utilities Act
- Ontario Planning & Development Act
- Parkway Belt Planning &
Development Act

Labour

- Construction Safety Act
- Industrial Safety Act
- Labour Relations Act

Attorney-General

- Ontario Municipal Board Act
- Expropriations Act

Transportation &
Communications

- Public Service Works on
Highways Act

Office of the Assembly

- Ombudsman Act

Revenue

- Assessment Act

Government Services

- Ministry of Government Services Act

Housing

- Planning Act

APPENDIX I

(cont'd)

MINISTERIAL RESPONSIBILITY

LEGISLATION

Provincial Secretary for
Resources Development

- Niagara Escarpment Planning &
Development Act

Energy

- Power Corporation Act
- Ministry of Energy Act
- Expropriations Act
(Minister's "approving authority"
for Ontario Hydro expropriations)

Examples of Areas of Policy Coordination and Guidance
to Ontario Hydro

Energy Conservation
Environmental Policy
Regional Planning and Development
Economic Policy (including anti-inflation)
Capital Borrowing
Public Participation
Social Policy
Financial Integrity
Productivity and Efficiency
Load Management
Export Policy
Inter-connections of Provincial Utilities
Fuel Availability
Exploitation of Technology
Canadian Purchasing Preference
Nuclear Power Commitment
Land Use/Sitings

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

COMMITTEE IN SUPPORT
OF NATIVE CONCERNS


PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

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No. 212

Royal Commission on the
Northern Environment

This exhibit is produced by

Committee in Support of Native

this 16 day of Dec. 1977

Aguilera

RECOMMENDATIONS
TO

ROYAL COMMISSION

on the

NORTHERN ENVIRONMENT

by

THE COMMITTEE IN SUPPORT

OF NATIVE CONCERNS

LONDON ONTARIO

The Committee in Support of Native Concerns was formed in November 1976. It was formed in recognition of the fact that efforts must be made to create better understanding and awareness between native and non-native peoples. This is achieved through community education about the issues and needs concerning native peoples. Input and involvement from native and non-native community members as well as from representatives of other interested groups are sought in order that the objectives of the Committee are met.

The Committee was a member of the No Pipeline Now Coalition which opposed the building of the Mackenzie Valley pipeline. More recently the Committee helped organize in London and surrounding area the Ontario North Today speaking tour sponsored by Grand Council Treaty # 9, Canadian Association in Support of the Native Peoples, Ontario Federation of Labour and other concerned organizations.

Resource development north of the 50th parallel is an issue of particular concern to the Committee in Support of Native Concerns, particularly with its impact on the native residents of Northern Ontario.

The Hartt Inquiry has a mandate to inquire into the effects on the physical and social environment of major enterprises in Ontario generally north of 50. It is of the utmost importance that all concerned people be allowed participation in the hearings to be conducted by the Commission.

Decisions made today in northern Ontario may well decide alternatives and life styles which are available to future generations of people in Ontario. This includes both the native and non-native population, northern and southern residents. The inquiry has the potential to explore new criteria of decision making and new directions for northern resource development. A chance to place the needs of the people of the province as the main objective for decisions made. In this respect all people of the province share a deep concern for how the inquiry conducts itself and the issues it addresses.

The Commission has asked the people of Ontario to guide it. Not only in the making of these decisions but what decisions should be made and what areas should be looked at.

With this in mind the Committee in Support of Native Concerns would make the following recommendations:

With regard to procedure:

The Commission will undoubtedly hold formal hearings in some of the larger

northern centres. In addition informal hearings should be held in all small northern communities. At these hearings time should be taken to ensure that anyone who wishes to speak to the commission has the opportunity. They should be conducted in a way which takes into account cultural differences of the people appearing and allows groups and individuals to speak directly without need of legal counsel. An example of cultural accomodation would be scheduling the hearings so they don't conflict with seasonal persuits such as trapping or harvesting wild rice.

There should be free access to all statements and briefs presented to the inquiry. Summaries of these statements should be made available at regular intervals during the course of the inquiry. These should be part of the commissions correspondence with interested groups and not just released through a few libraries. These summaries should be available in the Cree and Ojibway languages as well as English and French.

While most of the hearings should take place in the north and the opinions of northern people should be heeded the decisions about northern development will ultimately affect southerners also. For this reason the inquiry should hold a series of hearings in several southern communities so groups of individuals who are interested can make their views known. We would take this opportunity to invite you to London.

Areas of Special Concern:

Hearings should try and focus primarily on the social environmental and economic impact of massive resource development projects north of 50°.

Forest cutting practices:

The Reed proposal to cut 19,000 square miles of timber should be seriously studies as to its impact even if the company withdraws its plans. The principle behind it should be looked at as a guide to others who might make similar proposals.

Pipelines:

The effect of pipelines such as the proposed Polar Gas line should be examined in light of its impact on the existing native economy and life style.

Water Diversion:

Water diversion schemes should be studied not only for the effects on the people forced to move because their homes are flooded but also the possible

environmental effects on a continent with possible changes to weather patterns.

Mining:

Any mining operation should be carefully examined for its effect on the surrounding area. In the case of large operations like the proposed strip mine at Onakawana special consideration should be given to the potential pollution from the power plant the coal will feed.

Combined effect:

Each of these areas should be studied individually and in detail. When that has been done they must be combined to see what the total effect would be. It is important to understand that the cumulative effect may be far greater than the sum of the individual parts.

Alternatives:

At the other end of the scale the commission should examine the potential for small industry and resource development to take place. Development which allows control by the local residents and goes beyond an unhealthy dependence on one industry of mining endeavour.

One of the current problems facing the country is high unemployment. Perhaps it is time to examine development which would be labour intensive rather than capital intensive. If alternatives such as these are considered they too must be looked at in light of their effect on the culture and life style of the people who already live north of 50°.

It is hoped that recommendations of the Commission will be aimed at achieving stable regional economies which meet the needs of and are controlled by the local residents. It that is to be achieved then primary importance must be paid to what is being said by the people who live in the area north of 50°.

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SUBMISSION TO
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THE NORTHERN ENVIRONMENT

BY

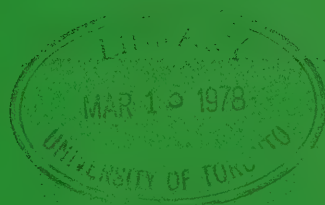
FACULTY OF ENVIRONMENTAL STUDIES
UNIVERSITY OF WATERLOO

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Submission For

The Royal Commission

on The Northern Environment

Information and Analysis Requirements

of The Commission

Faculty of Environmental Studies

University of Waterloo

December 16, 1977

J.G. Nelson
Dean
Faculty of Environmental Studies

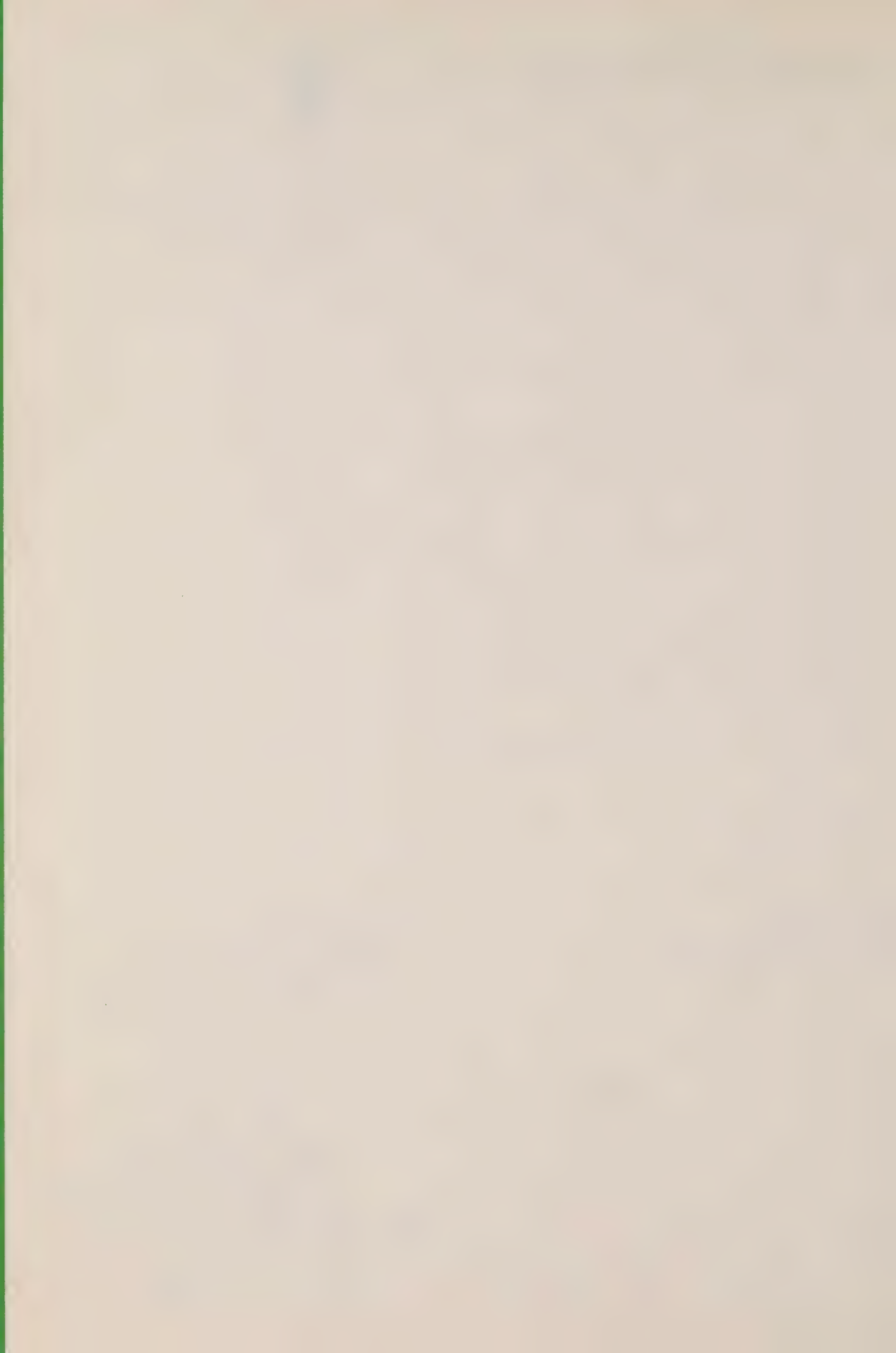
R.T. Newkirk
Associate Professor
School of Urban & Regional
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Faculty of Environmental Studies

No. 213

Royal Commission on the
Northern Environment

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this 16 day of Dec 19 77
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This submission which addresses three considerations of significance to the Commission on the Northern Environment has been prepared following discussions between its staff, other parties interested in information and analysis, and the Dean of the Faculty of Environmental Studies, University of Waterloo. A summary statement on the Faculty is attached as appendix I. The three considerations are the general question of scientific support for both participant submissions and Committee deliberations and some more specific recommendations on information management and content analysis.

Scientific Support

We consider here scientific support in its broad sense including not only (technical) physical resource base analyses but also social, economic and ecological analyses - particularly in the integrated sense.

The Commission, as called for in its mandate, is encouraging and supporting the several affected interest groups to prepare and submit position statements. This includes the underwriting of associated research and analysis. The result of this process will provide great volumes of information essential to Commission deliberations. However, it is likely that much of the resulting information and analyses will be presented in an adversary context with the various parties stressing information advantageous to their cases. In this context the Commission will have to hear extensive technical argument and decide upon conflicting scientific advice from participants.

We foresee that the Commission may wish to embark on careful scholarly examination of various submissions. In addition, it may find it desirable to request selected studies of its own which should be performed for objectiveness sake, by independent scientific groups. It is likely that such studies might be undertaken to obtain a series of consistent analyses across the entire region. The Commission is unlikely to be able to perform directly this large task without developing an extensive research operation. This is not recommended due to financial implications and the possibility of damaging the Commission's objectiveness. If this analytical task was performed by Commission staff, the Commission could be seen as an advocate participant in the debate. The Commission will wish to avoid this to retain its proper judicial role. It is essential that such disinterested analytical studies be undertaken in a consistent and systematic way. To this end we recommend the Commission establish an association with a core of independent but coordinated resource specialists. We feel that the University of Waterloo, as outlined below, could assist with this.

In its preliminary presentation, November 7, 1977, Grand Council Treaty No.9, states on page 25: "there is a real problem in ensuring that this tremendous breadth of sociological, environmental, technical, engineering, legal and political knowledge is effectively channeled into this Inquiry" and further on the same page: "It would be a heavy financial and organizational burden, if each participant were to provide his own backup. This would be wasteful and involve much duplication of effort". The Council then proposes the establishment of a third party "Environmental Protection Board". Their statement supports the ideas just advanced, although we are not convinced that such a board needs to be established. There are various

ways of establishing association with a well articulated and coordinated core of experts. In general, analytical reports by this core research group should be made available to all participants but only the Commission would request specific analyses.

An approach for providing access to the required scientific support could be to request a University which has adequate expertise on hand to establish a core research team. The team would be charged with the responsibility for coordinating appropriate experts both in that institution and in others (including the private sector, if required) to carry forward the research. If this approach is of interest to the Commission, The University of Waterloo, through the Faculty of Environmental Studies and the Office of Research Administration, is in a good position to consider responding. The Office of Research Administration (Annual Report attached as appendix II) is well established in organizing and administering contract (service) projects. The Faculty of Environmental Studies provides a broad base of subject area experts (outline of faculty research interests is attached as appendix III). In addition, numerous subject area specialists are available in the physical science and engineering areas who could be associated with any core research team.

Information Management

As the participants develop their research, file their reports and independent studies take place, large volumes of information in the form of maps, raw numeric data, and reports will be accumulated. In its presentation on November 7, 1977, Grand Council Treaty No.9 states on page 22: "In order that a complete examination of northern development takes place, all documents, plans, studies, reports and other materials in the control of

a participant must be made available to other participants as soon as possible." While it is not clear exactly how far the Commission may wish to use its powers to obtain data and reports, it is desirable that all information that is formally submitted to or requested by the Commission be made readily available.

During the process of inquiry, the Commission will obtain substantial quantities of spatial data in the form of maps, tables, graphs and reports. In order to work effectively with these materials to effect comparisons and display syntheses of the information to assist the Commission in establishing its findings, automated analytic mapping support is required.

We feel that both of these needs can be met effectively by establishing an information bank on a computer system which can provide key word and subject classification access to the information on hand. Equipment and system technology has advanced to the level that a combined information, data base, and map processing system can be established to support the Commission's activities. This can be achieved using currently operating systems. We see as the highest priority the establishment of a directory of information sources which can be accessed by all participants. Such a directory could be supplemented by archiving data and documents in the system. The University of Waterloo, with its expertise in computer applications, has on hand fully developed systems which can provide all of these services.

Content Analysis

The large volume of reports submitted and referenced in submissions to the Commission will require an examination of their contents for the purposes of quantitative summary. In addition, much important information

is available in the archives and current editions of newspapers and other documented mass communications. A complete examination of the question of the future for the land north of 50 requires that the Commission obtains information and understanding of media perceptions and responses to developments over time and space. The Public's knowledge and acceptance of projects and policies may ultimately determine the direction of decision making. In the Faculty of Environmental Studies at the University of Waterloo work has taken place which has produced a content analysis method for newspaper articles describing a particular resource management situation (Needham 1976 and Needham and Nelson 1977). This analytical approach has proven effective in terms of the Great Lakes' water level situation and it appears to offer a blueprint for the consideration of other areas, such as wetlands conservation, internal shoreline management, water quality management and general considerations of resource management and development. While the method has been applied mainly to newspaper articles, the method is general and can be used to do content analysis of many submissions and reports received by the Commission.

At the University of Waterloo advanced general purpose information systems are available (e.g., FAMULUS, SPIRES) which would facilitate such a study. In this context recent work on a geotechnical data base has shown the potential of the SPIRES system to several types of geographical problems. We recommend that the Commission request a content analysis study to support its examination of the full implications of development north of 50.

Summary

In conclusion, we see (a) the need for the Commission to establish an association with an analytical support group, (b) to embark on the

development of an information management system and (c) a content analysis approach for reports and articles in newspapers and other documented mass communications and in particular for submissions to the Commission.

This submission has been prepared under very short notice. We may therefore not have developed some of our ideas as fully as the Commission would have liked.

Appendix 1

University of Waterloo

The Faculty of Environmental Studies, University of Waterloo, consists of the following four academic/administrative units:

- 1. School of Architecture
- 2. Department of Geography
- 3. Department of Man-Environment Studies
- 4. School of Urban and Regional Planning

They have been grouped together because they have many interests and goals in common. Students in each of these four programmes - architecture, geography, man-environment studies and planning - frequently have need for similar types of library and laboratory facilities. Graduates of each of these four fields of study frequently pursue careers in similar types of endeavour in similar institutions.

For convenience and efficiency in providing the similar types of facilities needed in each of the four areas of study, these four units - the School of Architecture, the Department of Geography, the Department of Man-Environment Studies and the School of Urban and Regional Planning - have been grouped under an umbrella called the Faculty of Environmental Studies.

The Faculty of Environmental Studies of the University of Waterloo has the task of finding rational, acceptable, humane and imaginative solutions to the many complex problems of the twentieth century. Students are encouraged to participate in this task through their courses of study in the two departments, Geography and Man-Environment Studies, and the two professional schools, Architecture and Urban and Regional Planning.

The concept of education in the Faculty of Environmental Studies revolves around the requirements of obtaining necessary information toward a degree and encouraging initiative in research and experimentation. This is accomplished by maintaining inter communication between the four units, and by maintaining the ability of students to take courses and consult with professors in all four areas of specialization.

The Faculty of Environmental Studies offers the following degrees:

Bachelor of Environmental Studies (B.E.S.)

Bachelor of Architecture (B.Arch.)

Master of Arts (M.A.)

Doctor of Philosophy (Ph.D.)

- B.E.S. - Pre-Professional Architecture (3 years) rotating work/study co-operative scheme.
- B. Arch. - Professional Architecture (2 years) rotating work/study co-operative scheme.
- B.E.S. - Honours Geography (4 years)
- B.E.S. - Major in Geography (3 years)
- M.A. - Geography
- Ph.D. - Geography
- B.E.S. - Honours Man-Environment Studies (4 years)
- B.E.S. - Honours Urban & Regional Planning (4 years)
- M.A. - Regional Planning & Resource Development
- Ph.D. - Regional Planning & Resource Development

APPENDIX II

UNIVERSITY OF WATERLOO

OFFICE OF RESEARCH ADMINISTRATION

Report for 1976/7 Year

UNIVERSITY OF WATERLOO
OFFICE OF RESEARCH ADMINISTRATION

Report for 1976/7 Year

Introduction

1976/7 was a year in which the status quo was maintained as far as external funding was concerned. However, indications to date would lead us to project increases for the 1977/8 year.

For future years we must wait to see the impact of the new granting councils, which we expect to be created later this year, the impact of the new federal/provincial committee on research, the impact of any extension to government contracting-out schemes and, above all, the impact of our own performance as a university in the area of research.

1976/7 saw a further increase in our involvement in contract research with the private sector, and continued efforts in attempts at technology transfer.

The research grants catalogue continues to be revised and issued annually to all faculty members and the research newsletter continues to receive favourable response from industry and government agencies. The university established a Biohazards Committee in February, 1977 in accordance with the newly issued "Guidelines for Handling Recombinant DNA Molecules and Animal Viruses and Cells" which prescribe safety measures to be used in carrying out research with biological agents which may be hazardous to the health of the researchers involved and to the public at large. The Animal Research Committee has continued to review appropriate grant applications and no significant change has occurred in its area of responsibility this year.

The Office of Human Research reviewed 159 applications related to research involving humans. More than 80% of these projects emanated from

the departments of Psychology, Kinesiology and Recreation. These projects were distributed about equally among undergraduate honours projects, graduate theses and faculty research. The Office acted as the liaison between University of Waterloo researchers and 75 Public and Separate Schools in the region. In those schools 3,812 children participated as subjects in University research projects. To provide feedback to the school system and to keep them informed of our related research activities, a number of projects have been organized by the Office. These include Professional Development Days which were attended by teachers, principals, superintendents and consultants, and also a Volunteer Programme to provide students studying educational psychology and related subjects with an opportunity to work with children in educational settings and to provide classroom teachers with assistance in tutoring children who have special problems.

Grant Supported Research

After the welcome increase in 1975/6, the year 1976/7 appeared to be one of holding the line overall. There were some pleasing developments, however. The increases in the Faculties of Environmental Studies and Human Kinetics & Leisure Studies are worthy of note. (Indeed the Human Kinetics & Leisure Studies increase of 24% follows upon a 40% increase in the previous year). Science and Engineering maintained the same level as 1975/6. Mathematics dropped significantly, due solely to a change in emphasis in one research area and the consequent termination of a major grant. The decrease in the funding in Arts, is disconcerting, considering the efforts by researchers in this area. The decline in the university grant is due to the phasing down of negotiated development grants. For further details see Table (1).

TABLE (1)

GRANTS SUMMARY

(a) <u>Sources</u>	<u>1975/6</u>	<u>1976/7</u>
Ontario Government Agencies	\$ 214,635	\$ 280,289
Federal Government	4,910,154	4,671,033
Industry & Business (Canada)	69,810	52,000
Miscellaneous	124,355	150,608
U.S. Grants	73,070	113,887
TOTAL GRANTS 1975/6 & 1976/7	<u>\$5,392,024</u>	<u>\$5,267,817</u>
(Total in 1974/5 was \$4,714,461)	=====	=====

(b) <u>Recipients</u>	<u>1975/6</u>	<u>1976/7</u>
University	\$ 467,424	\$ 388,030
Arts	356,217	301,981
Environmental Studies	87,351	166,355
Human Kinetics & Leisure Studies	196,504	243,907
Mathematics	948,768	799,248
Science	1,398,006	1,395,423
Engineering	1,957,118	1,944,016

Contract Research

The most significant feature of contract research projects in 1967/7 was the continued swing to the private sector as the source of contract funding. An increase of almost 35% was received from the private sector for the 1976/7 year. The amounts of contract research undertaken for the Federal Government and the private sector are now closely equal. The amount of contract research on behalf of the Government of Ontario, however, continues to decrease. This may be, in part, due to the restraint programmes of the Provincial Government. It may also suggest that more effort is required in informing the various Ontario Government agencies of the expertise and resources of the University which seem increasingly attractive to both the Federal Government and the private sector. There is certainly much more day-to-day contact currently with Federal Government agencies than with those at the Provincial level. It is also interesting to note that 65% of the value of new contracts signed for work in the Faculty of Engineering in 1976/7 was with the private sector.

Group activity, involving not only researchers from across the university, but also involving industry and government has been a new successful development this year. One major project centred in Mechanical Engineering, for example, also involved researchers from Electrical Engineering and Statistics as well as employees of the sponsoring company and a consultant from overseas. An energy research group has been formed and currently is largely involved in contract research in a consortium arrangement with Electrohome Ltd., a manufacturing company, and Giffels Associates, an engineering consulting company. Some of the same university group are also involved in a project for the Canadian Electrical Association. Among other groupings coming together through contract activity is a group involving the Earth Sciences, Chemistry, Biology and Civil Engineering Departments. Indeed it seems that it is contract

research which is providing the most effective vehicle for facilitating the bringing together of the expertise of various disciplines in a real working arrangement within the University. The challenge and stimulation provided by this activity must certainly contribute positively, through the individuals concerned, to the general academic environment of the institution.

Another feature which is developing as the University becomes involved in larger scale projects is that opportunity is provided for the hiring of full-time researchers, usually our own post-masters or post-doctorate graduates, for work on these contracts. In this situation the faculty act as principal investigators/supervisors/consultants to the projects. The full-time researchers undertake the bulk of the day-to-day research work. Graduate students can be involved directly or in related grant-supported research unrestricted by contract limitations. It is our hope that the full-time researchers will move out into industry as the project proceeds from the university phase into the stage where the work must be continued in industry itself. In a real sense this contract experience could provide a bridge from the academic post-graduate degree to work in the industrial scene. Over this past year of the three such researchers that have left us, two started their own engineering business and one has become a private full-time consultant to government and industry. If this is anything to judge by it would appear that this full-time experience, within the university, on some significant industrial project has provided a valuable "finishing school" for our graduates in preparing them for useful careers. Indeed we may be developing a very valuable mechanism for creating jobs in the industrial scene for graduates with advanced level degrees and facilitating technology transfer in the process. This may also be a mechanism

through which opportunities can be demonstrated to our senior undergraduates some of whom might thereby be encouraged to undertake post-graduate research activity.

All Faculties of the University are now participating in contract research. The activity is currently most evident within the Earth Sciences Department and within the Faculties of Engineering and Human Kinetics and Leisure Studies and, this year, a substantial increase in Mathematics. It is expected that increasing involvement of other sectors of the University will continue to develop especially if the Federal Government begins to contract-out more work in the human sciences area as it has recently indicated is its intention.

CONTRACTS

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TABLE (2)

GROSS BILLINGS

BASED ON MAY 1 - APRIL 30 REPORTING YEAR¹

	<u>\$ Gross Billings</u>
68/69	67,800
69/70	185,800
70/71	277,900
71/72	364,800
72/73	457,000
73/74	605,000
74/75	942,500
75/76	1,153,278
76/77	1,046,035

TABLE (3)

SOURCES OF NEW CONTRACT FUNDS

	<u>1973/4</u>		<u>1974/5</u>		<u>1975/6</u>		<u>1976/7</u>	
	<u>#</u>	<u>\$</u>	<u>#</u>	<u>\$</u>	<u>#</u>	<u>\$</u>	<u>#</u>	<u>\$</u>
<u>Government</u>								
Federal	28	406,000	30	488,900	34	475,000	33	503,890
Ontario	7	117,000	15	476,100	16	195,000	7	97,525
U.S.	1	17,000	2	66,300	2	67,100	-	----
Other	-	----	1	5,100	3	26,800	-	----
 <u>Industry</u>								
Canadian	26	177,000	24	175,100	27	350,500	28	391,988
U.S.	13	153,000	5	26,200	1	13,900	4	103,400
Miscellaneous					3	4,000	-	----

TABLE (4)

CONTRACT RESEARCH

(New contracts initiated by Faculty)

By Faculty (New Contracts)	<u>1973/4</u>		<u>1974/5</u>		<u>1975/6</u>		<u>1976/7</u>	
	<u>#</u>	<u>\$</u>	<u>#</u>	<u>\$</u>	<u>#</u>	<u>\$</u>	<u>#</u>	<u>\$</u>
Engineering	54	650,000	45	520,700	49	770,033	39	699,276
Mathematics	5	90,000	5	220,100	3	29,235	8	130,847
Science	15	124,000	14	281,700	11	174,866	12	147,605
Environmental Studies	--	----	7	150,700	3	39,724	5	26,050
Human Kinetics & Leisure Studies	--	----	4	18,300	18	115,937	7	72,693
Arts	1	6,000	2	46,400	2	11,214	2	18,587

TABLE (5)

NEW CONTRACTS INITIATED/DEPARTMENT

	<u>1975/6</u>	<u>1976/7</u>
<u>Arts</u>	\$	\$
Sociology	7,122	----
Romance Languages	4,092	3,300
Psychology	----	15,287
<u>Engineering</u>		
Chemical Engineering	79,506	188,135
Civil Engineering	209,091	109,213
Electrical Engineering	123,538	73,185
Mechanical Engineering	305,781	297,746
Systems Design	52,105	17,592
Management Sciences	----	8,500
<u>Human Kinetics & Leisure Studies</u>		
Kinesiology	38,130	7,573
Recreation	77,807	65,120
<u>Environment Studies</u>		
Architecture	----	19,300
Geography	----	6,000
Man-Environment	29,174	----
Urban & Regional Planning	10,550	750
<u>Mathematics</u>		
Applied Mathematics	----	51,905
Computer Science	23,750	66,360
Statistics	5,485	12,582
<u>Science</u>		
Biology	8,905	----
Chemistry	----	500
Earth Sciences	165,961	147,105

Innovation/Entrepreneurship/Technology Transfer and New Initiatives

Efforts have continued to attempt to transfer technology from the University directly to the market place. Several items are currently being pursued with potential licencees. The Waterloo Scrubber for example is now in pilot-plant trials in Quebec and Ohio. Currently a new type of extruder for plastics, rubber and possibly food is under aggressive development having passed the stage of demonstrating its feasibility. Patents have been applied for in seven countries and licensing negotiations with a Canadian manufacturer are well advanced. The University currently has assigned to it about 65 patents or potential patents. Some of these are being handled by CPDL and some are being handled on a direct partnership basis between the University and the Inventor. The University participated in the World's Fair for Technology Transfer in Chicago in February, 1977 and plans to have a booth in the 1978 World's Fair.

It is frequently contended that new ventures are often the most appropriate means of putting new technology to work in society and it would therefore seem fitting that education and training in new technologies be accompanied by preparation for starting new business enterprises. Such education and training can probably only be done in conjunction with an innovative environment in which new enterprises are actually being created. The type of enterprises which would most appropriately emerge from within a university would be those which are technology or knowledge based. The various mechanisms, by which the role and commitment of the University of Waterloo in the field of technology transfer, technological innovation and entrepreneurship can be extended, are being actively studied by the Office of Research Administration, in cooperation with various members of the University, and in discussion with representatives of the two major

levels of government. Attention has also been drawn to the opportunities afforded by the possible availability of land on the North Campus for commercial and government research laboratories.

The Inventor's Assistance Program has now operated for one year and has been funded for a further year by Canadian Patents & Development Ltd. It is hoped that this service could eventually be extended to provide post-evaluation assistance to inventors. Indeed one might envisage this programme as eventually being a division of an "Innovation Centre" involving initially an Enterprise Assistance Programme, a Process Innovation Division, a Software Distribution Division and so on. The possibility of establishing such an Innovation Centre is currently being explored. If the emergence of new innovative technology or knowledge based enterprises is to be an important factor in the continued creation of wealth and employment in Canada, then it is important that the University consider its particular role in this regard.

A significant initiative this year was the commissioning of an agent to work on our behalf in connection with the transfer of technology in the computer communications networks field. Mr. W.G. Hutchison, President of William G. Hutchison Ltd., who has had considerable experience at senior levels in the computer industry will be the agent for the Computer Communications Networks Group. This, we believe, is the first such venture on the Canadian university scene and if successful, the concept could possibly be extended to other specialized groups.

FACULTY INTERESTS LIST

Faculty of Environmental Studies
September 1977

Affiliation Code

- A -- School of Architecture
E -- Faculty-wide appointment
G -- Department of Geography
M -- Department of Man-Environment Studies
P -- School of Urban and Regional Planning

ABELL, Helen C.	(P)	Rural sociology; rural land development.
BANERJI, Anupam	(A)	Architectural acoustics; survey of contemporary architecture and architects; basic design; tribal architecture of North America.
BATER, James H.	(G)	Soviet Union; industrial geography; urban historical geography.
BELISLE, James D.	(A)	Ecology; site planning; design methods; drawing.
BOYER, Jeannette	(M)	Natural hazards, resource management, environmental psychology.
BROWN, Anne	(A)	Architectural theory, methodology, programming and research.
BRYANT, Christopher R.	(G)	Economic geography; agricultural geography; Quantitative methods; rural land use problems in areas of metropolitan expansion, especially France and Southern Ontario.
BULLOCK, Ronald A.	(G)	Cultural geography; Africa.
BUNTING, Trudi E.	(G)	Urban geography; behavioural approaches to the urban environment; urban activity systems; environmental personality.

- CARTER, Novia A.M. (P) Social action strategies; complex organizations and decision-making processes; evaluative research; alternatives; urban systems.
- COBLENTZ, Harry S. (P) Environmental strategies; planning and minority groups; social policy planning.
- CUMMINGS, Laurence A. (A) Medieval and Renaissance life style, thought, literature, art and architecture, including town design.
- DAY, J. Chad (G) Conservation and resources management. international resources management.
- DE'ATH, Colin E. (M) Urban anthropology; minority groups, Oceania; urban bioenergetic systems; environmental education; Nepal; human rights; calisthenics.
- DeVOS, Anthony (P) Natural Resource Management and Park Management; emphasis on Africa, Middle East, Western Europe, and North America.
- DIEM, Aubrey (G) Europe; problems of developing countries.
- DORNEY, Robert S. (P) Ecology; conservation and natural resource policy development; environmental design and planning; environmental impact.
- DUDYCHA, Doug J. (G) Automated cartography; quantitative methods; urban geography.
- DUTT, Om (A) Inelastic behaviour of structures; environmental response of structural elements.
- ELLIS, Robert C. (P) Forest nutrition; forest soils; land evaluation; land use planning.
- ELMITT, Michael W. (A) Application of modular structures to future high density population areas; materials and climate control.

- ERB, David K. (G) Geomorphology (tropical and quaternary); air photo interpretation; A.P.I. applied to resources inventory, pre-planning/environmental impact assessment; integrated aerial survey.
- ESTRIN, David (E) Environmental law; environmental "Bill of Rights"; environmental impact assessment procedures; resources and planning law.
- FARKAS, Carol S. (M) Environmental nutrition (main areas of study fluoride, mercury, Vit C); environmental and nutritional education; edible wild vegetation; Indian nutrition and health, Indians in penal system, Indian spiritualism; environmental ethics; mysticism, and Eastern thought.
- FARKAS, Edward J. (M) Application of chemical engineering principles to environmental problems; air and water pollution; heavy metals; energy resources.
- FAUQUIER, John (M) Aviation; communications, organizational behaviour; decision theory, game theory, complex decision problems; environmental economics, politics of public policy, pressure groups, social utility.
- FISCHER, Linda (P) Social Planning; human rights; sex roles and education, occupations; medical care utilization.
- FOSTER, Mary K. (P) Medical sociology; psychosocial aspects of health; adaptive health planning.
- FRANCIS, George R. (M) Natural resources; international development and environmental concerns; environmental education.
- FREEMAN, Milton R. (E) Cultural ecology, adaptation, and their applicability to public policy most recently with respect to the Arctic.

- GARDNER, James S. (G) Alpine and Arctic geomorphology; environmental hazards; geographic education.
- GEHL, Jan (A) Architect and social scientist with major research in studying the interaction of humans in the built environment; human awareness, group interaction and social behaviour as functions of space and architectural design.
- GERTLER, Leonard O. (P) Regional planning and development; policy related to national urban patterns, land, recreational resources, new communities; intergovernmental processes.
- GREENSPAN, David B. (E) Practice of community planning law.
- GUELKE, Leonard T. (G) Cartography; history and methodology of geography; historical geography; Africa.
- GUPTA, Sehdev K. (M) Film as art and literary medium; psychology of perception and visual communication; cultural environment and mass communication; history and philosophy of science and technology.
- GUSTAVS, Erland (A) Architecture and planning in Scandinavia; team approach to design problem solving; the process of marketing design services; planning, interior design and graphics.
- HAIGHT, Murray E. (P) Ecology; resource management; human and population ecology; public health.
- MALDENBY, Eric R.M. (A) Contextualism; architectural and urban history; critical modes.
- HERZOG, Saul (P) Urban design; regional urban forms; scenic landscapes.
- MORTON, John T. (P) Regional planning and development; rural planning; citizen participation.

- HUNT, Brian R. (A) Architectural practice; design techniques; influence of climate in architectural design.
- MIYMA, Balasubramanyam (G) Population geography, cultural geography, urban geography; geography of development related to third world countries of Africa, Asia and Latin America.
- IRVING, Robert M. (G) Rural geography; amenity agriculture; land use.
- IZUMI, Kiyoshi (P) Human information and its systems; psycho-bio-social bases of environmental design; philosophy of/for future; human ecology; health, environment and planning.
- KEITH, Robert F. (M) Communications, decision-making and innovation; regional development, technology assessment, energy planning and policy analysis.
- KESIK, Andrzej (G) Remote sensing of environment; geomorphology of cold environments; techniques of geomorphological surveying.
- KNAPPER, Chris K. (E) Social and psychological reactions of human beings to different environments; developing sensitive means to measure such reactions (especially attitudinal and "perceptual" measures); relevant research to date has primarily been in the area of interpersonal perception ("impression formation") and driving behaviour.
- KRUEGER, Ralph R. (G) Geography of Canada, land use; regional planning and development.
- LAZAROWICH, N. Michael (P) Social policy planning, sociology of urban and regional growth and development; outdoor recreation.

- LeDREW, Ellsworth F. (G) Arctic and Alpine Meteorology; Numerical Analysis, energy and radiation balance of Canada; Remote sensing of the physiographic characteristics of Canada.
- LERNER, Sally (M) Social impact assessment; environmental decision-making; modes of political participation.
- MARTIN, Larry R.G. (P) Urban-centred regional planning, philosophy and methodology; urban land dynamics, land markets, foreign ownership of land, land development policies and strategies.
- MATTHEWS, Burton C. (G) Soil classification and genesis; soil management.
- McBEAN, Ed A. (P) Environmental engineering; water resources management; public investment.
- McBOYLE, Geoffrey (G) Climatology, weather modification; geographic thought and methodology.
- McINTYRE, Donald (A) Colour and light as related to architectural design.
- McLELLAN, Alexander G. (G) Glacial geomorphology; environmental and resource applications of geomorphology; field studies.
- MICHALENKO, Greg C. (M) Mycology; politics of resource development.
- MITCHELL, W. Bruce (G) Natural resources management; decision-making and institutional arrangements; policy and programme evaluation.
- MORGAN, Alan V. (M) Relationship of geological features and processes to man and his environment; natural disasters; permafrost regions and northern life; relationship of fossil insect groups in determining climate change.
- MULAMOOTTIL, George G. (P) Ecology and conservation and resource management; water resources planning and environmental pollution.

- NASH, Peter H. (E) Theories and methods of the planning process and patterns of administration; applications of geographic concepts, methods and techniques, including futuristics, prognostics and ekistics.
- NELSON, J. Gordon (E) Land use history and landscape change
(G) and their relevance to planning, human ecology, resource and public land management.
- NEWKIRK, Ross T. (P) Environmental Impact Assessment;
(E) technology assessment; research methodology; systems theory and computation; computer graphics and cartography; utility network planning; natural resources inventories and classification systems; urban and regional information systems.
- O'BRIEN, Anne T. (M) Molecules; organic chemistry of drug synthesis and conformational analysis; native American people; alkaloids; future studies.
- OFFICER, E. Roy (C) Historical geography of Canada; political geography; geographic thought and methodology.
- PRESSMAN, Norman E.P. (P) Evolution of cities and history of urban planning. International comparative urban planning, development and design; new towns and urban growth policy.
- PRESTON, Richard E. (G) Urban geography; regional development; Pacific Northwest.
- PRIDDLE, George B (M) Resources management; recreational land use; environmental perception, especially wilderness perception, pleasure driving and scenic roads, and boating on the Great Lakes.
- RICH, S. George (P) Politics and administration of planning; rural planning.

- ROBINSON, James E. (M) Transportation and energy issues; environmental pollution; environmental education.
- RUSSWURM, Lorne H. (G) The rural-urban fringe: problems, planning and policy; urban geography; systems approach as an integrating concept in geography.
- SCHRECKER, Anne H. (A) Primitive and vernacular building; phenomenology of architectural form; ecological impact of built environment; alternative energy sources and energy policy.
- SCHUSTER, Reinhold M. (A) Structure analysis and design in architecture.
- SEMPLE, Terence M. (M) Systems Dynamics-systems simulation; computer-based education; psychological correlates of the man-environment interaction, learning theory, personality theory, and experimental psychology; psychosomatic medicine.
- SHALINSKY, William (P) Social welfare; social planning; small group theory and its application to the planning process; interdisciplinary groups.
- SIMS, Ronald, H. (A) Architectural form and structural technique, historical and modern; patterns of mobility and trading; marine structures; system building.
- SOMFAY, Joseph C. (A) Group design behaviour; aesthetics in relation to the architect; behaviour of people in the built environment; solar energy; climate as a design determinant in buildings; print making and building construction.
- STOKES, Peter J. (A) Author and expert on 19th century Canadian architecture; practicing architect with a speciality related to architectural conservancy advocate for the preservation and restoration of historic architecture.

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| STRICKER, Herb I. | (P) Land Development and Building Industry. |
| SUFFLING, Roger C. | (P) Ecology; resource management; environmental impact assessment, utility corridors, plant ecology. |
| THEBERGE, John B. | (P) Ecology; natural resource planning; park planning; wildlife management. |
| THOMPSON, Fred S. | (A) Problem-solving behaviour of architectural students as members of a design team. |
| WALKER, David F. | (G) Industrial geography and location theory; regional development especially in Canada, U. K., France and Austria. |
| WALL, Geoffrey | (G) Outdoor recreation; environmental perception. |
| WATTS, Fraser H. | (A) History of garden design; horticulture; the use and design of space between and around buildings; climate and architecture; the design of multiple housing with concern for use participation. |
| WEAVER, Sally M. | (P) Sociology of northern people; minority groups and planning. |
| WHITE, Norman F. | (P) Environmental health planning; health care systems. |
| WILJER, Robert P. | (A) The symbolic orders and the nature of the environment. The writing of poetry. |
| WOOD, Dennis, H | (P) Municipal Law; community planning law;
(E) environmental law; housing policy. |
| ZVILNA, Jekabs | (A) Theory and practice of visual form: rational and subrational approach. |

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- 77N22

SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

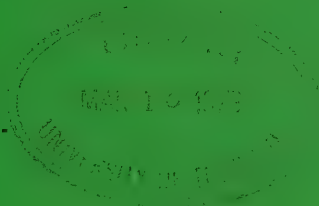
OXFAM CANADA

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



Ontario

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

OXFAM CANADA
c/o OXFAM ONTARIO
175 CARLTON AVENUE
TORONTO, ONTARIO
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PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
416/965-9286

MANULIFE CENTRE
55 BLOOR STREET WEST
ROOM 801
TORONTO, ONTARIO
M4W 1A5



No. 214

Royal Commission on the
Northern Environment
This exhibit is produced by

Oxfam Canada

this *16* day of *Dec* 19*77*

S. G. ...

OXFAM- CANADA:

PRESENTATION TO THE ROYAL
COMMISSION ON THE NORTHERN
ENVIRONMENT.

PRELIMINARY MEETINGS,
TORONTO, ONTARIO,
DECEMBER 16, 1977.

Mr. Commissioner,

For OXFAM-Canada one of the most critical aspects of large-scale development projects in northern Ontario is their socio-economic and environmental impact on the north and on northerners. The issues raised by this inquiry are vital to northerners and to southerners in Ontario alike. Most important, they offer the opportunity to choose between real development alternatives that are increasingly relevant to all of us in the province.

OXFAM-Canada, the Canadian charitable organisation founded in 1963, has been active during the past fourteen years working with people in the Third World, and in Canada, through long-term development projects which have confronted some of the immediate injustices of their daily lives. Through this direct experience with development/underdevelopment, a perspective has emerged for OXFAM-Canada which has shaped our goals and programmes in developing nations and in Canada.

That perspective is based on an intensive review of our practical experience in international relief work and long-term development projects. As an active participant in the international OXFAM movement, we have

had available to us a wealth of international experience gained over three decades. Our project work in the Third World and among native peoples in Canada has been supported by a network of field staff deployed by OXFAM and located in various regions of the Caribbean, Latin America, Asia, Africa, and Canada. The field workers have had a direct insight into the particular dimensions of poverty and underdevelopment where they work.

Our work has included extensive programmes with native people in Canada since 1970, specifically, with the Dene and the Inuit in the Northwest Territories, with the Grassy Narrows band and with the White Dog band in northern Ontario.

Our work in underdeveloped countries and regions has taught us that the primary causes of underdevelopment lie in the extremely unequal relationship of wealth and power, between these areas and the developed, industrial areas of the world. An effective challenge to underdevelopment must fundamentally restructure this unequal relationship of economic and political power.

Working towards these objectives, OXFAM-Canada has emphasized three closely related aspects in our work: support for locally determined and controlled, self-help projects that pose long-term solutions for the conditions

...../3

that maintain poverty; recognition of the critical importance of effective public education programmes in Canada to strengthen the awareness among Canadians of the global dimensions of inequality and injustices in the present international order; and support for a political affairs programme to monitor and encourage meaningful changes in Canadian aid, trade, and investment policies towards the Third World and within our own society as well.

In northern Ontario, our experience has brought with it the realisation that this part of our province shares many of the characteristics of underdevelopment. This is especially evident with respect to the lives of native people in the north. For this reason, your inquiry, Mr. Commissioner, must examine development alternatives which redress the imbalance and inequities in the social, political and economic relationships affecting the north in Ontario. And while our major concern as a development agency is with the position of native northerners in the province, we cannot help but see that these development alternatives are equally relevant for all northerners.

From this perspective, we would like to make some specific recommendations appropriate to this preliminary meeting that we hope will guide the inquiry in its investigations:

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- (1) The inquiry must take the broadest view of the causes affecting the human and physical environment of northern Ontario. As we have said in this submission, we feel the fundamentally unequal relationship of economic and political power suffered by the north and northerners is at the foundation of the north's present situation. These relationships must be investigated, and submissions of evidence relating to them must be solicited and funded if necessary. The considerable expertise of third-party groups -- in particular of public interest groups such as ours -- should be drawn upon in this part of your inquiry.
- (2) Similarly, submissions of evidence should be solicited and funded (if necessary) on the issue of development alternatives available for the north. From our point of view, this must include alternatives that aim at increasing self-reliance, and that allow a considerably greater degree of economic and political power to northerners. Again the relevance of public interest group expertise must be emphasized.
- (3) Because the first condition of changing the unequal relationships in which the north finds itself is a change in the awareness and attitudes of Ontarians, it is essential that your inquiry, Mr. Commissioner, be not only an investigation, but also an educational process that seeks to involve as many Ontarians as possible in the issues of underdevelopment and environmental impact in northern Ontario.
- (4) To make the inquiry an educational process, southern hearings are essential. Since the resolution of concerns about the north will also necessarily seriously affect alternatives in the south of Ontario, southerners must be consulted and at the same time enlightened about the north. These hearings should include informal sessions in a supportive environment. Only in this way will public participation be maximised.
- (5) Educating Ontarians about the north will take more than southern hearings, Mr. Commissioner. It will also require a concerted effort to publicise your inquiry in the south, to publicise the issues with which it is concerned in the south, and to do this through your own staff and through public groups who have expertise and concern about the north. Once again, I would point to the

capacity and suitability of public interest groups such as ours in this process.

Thank you, Mr. Commissioner, for this opportunity to speak to you. OXFAM-Canada I can assure you will be following your inquiry closely, and will participate in it as far as possible. Appropriately broad terms of reference for the inquiry, and funding possibilities for groups such as ours, to do education and research, will certainly increase our ability to participate fully.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

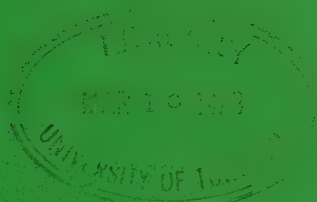
ONTARIO MINISTRY OF LABOUR

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION ~~ON THE~~ THE HON. MR. JUSTICE
ON THE NORTHERN ~~ENVIRONMENT~~ E. P. HARTT
ENVIRONMENT ~~COMMISSIONER~~ COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO MINISTRY OF LABOUR
Office of the Deputy Minister
400 University Avenue
14th floor
Toronto, Ontario

PRESENTED AT

TORONTO

ON

DECEMBER 16, 1977

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT
416/965-9286

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TORONTO, ONTARIO
M4W 1A5

No. 2/5

Royal Commission on the
Northern Environment

This exhibit is produced by

Ministry of Labour

this *16* day of *Dec* 19 *77*

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ONTARIO MINISTRY OF LABOUR'S

SUBMISSION TO

THE ROYAL COMMISSION ON NORTHERN ENVIRONMENT

December 15, 1977

The Ministry of Labour is responsible for activities relating to industrial relations, employment standards, occupational health and safety, human rights, and women's issues and programs. The Minister of Labour is also responsible for the Workmen's Compensation Board, and chairs the Ontario Manpower Coordinating Committee.

Aspects of the Ministry's responsibilities applicable to the area north of 50° latitude are mainly related to manpower and human rights. The Human Rights Commission will be presenting a separate brief to the Commission.

The submission deals with Ministry concerns and program responses to manpower issues identified by local groups in the northern part of the province.

MANPOWER ISSUES

1. Because of a history of disadvantage, as well as poor employment opportunities, there has been an under-utilization of native manpower resources in Northern Ontario.
2. The recruitment of labour often occurs outside the local employment area (e.g. woodlands workers are recruited from Northeastern Ontario). In many instances, companies have not been successful in employing Native people.
3. There is a large concentration of employment in the resource industries (i.e. mining, forestry, and related manufacturing). Relatively large numbers of people who are not suited for this type of employment are jobless or under-employed. As a result there are pockets of heavy reliance on government income support programs.

4. Local groups have suggested that skill training facilities are often inappropriate, unavailable or inaccessible to meeting the needs of local employers and the existing or prospective labour market participants.

PROGRAM RESPONSE

1. Development of Labour Market Information - In recognition of the manpower issues identified above, the Ontario Government is establishing a continuing capability to better understand, and suggest actions for, alleviating manpower problems in the Province. This capability will assist programme managers in improving the delivery of manpower related services in Northern Ontario.
2. Community Employment Strategy (CES) - CES is a joint federal-provincial planning and coordinating mechanism which, in conjunction with designated communities, attempts to address the local employment problems of people who experience continuing difficulty in finding and keeping productive full-time employment. Additionally, it attempts to maximize the efficiency of existing employment related government programs. The current developmental phase commenced in April 1976 and is scheduled to conclude on March 31, 1979.

Given the developmental nature of this phase, communities were chosen on the basis of their unique employment problems and perceived opportunities, and the interest within the community of participating in the CES process. In this regard, the Regional Municipality of Hamilton-Wentworth was chosen in the south, and in northwestern Ontario, the communities of Geraldton-Longlac-Nakina, Fort Frances-Rainy River and the Big Trout Lake Indian Reserve were selected. It is the activities in the latter three communities which may be of interest to the Hartt Commission.

There is a local CES Committee, chaired by a local citizen, and composed of representatives of the diverse interest groups. Representation on these committees include business, labour, target group members, civil servants, native people and local elected officials.

The local committee is responsible for identifying local employment problems, selecting the target groups upon which it wishes to focus its attention, (e.g. youth, agricultural sector, an Indian Band), developing solutions to these problems and participating in the implementation of the selected solutions.

The unique feature of the CES process is that the planning responsibility resides in the community and, as a result, corrective action is more highly sensitive and responsive to local needs and local aspirations. A variety of activities are underway in each of the CES communities and a detailed account of these activities can be found in CES in Ontario - A Mid-Term Review. (Please see attached.)

3. Pickle Lake Manpower Committee - The Thierry Mine of the UMEX Corporation is a large copper/nickel mine located about twelve miles from the two small unorganized towns of Pickle Lake and Central Patricia in northwestern Ontario. Historically, these communities have been, and continue to be, characterized by dependency on resource-based industries. The other important factor of the Pickle Lake area is the Osnaburgh Reserve about 20 miles from Pickle Lake and about 30 miles from the Thierry Mine.

The essential problem involved the development of programs which would allow native persons to take advantage of the employment opportunities offered by the Thierry Mine while at the same time being able to maintain their traditional way of life. Therefore, in addition to providing the necessary skill training which would qualify the natives for the job opportunities,

it was necessary to work on programs and services relating to such areas as alternate work arrangements, housing and transportation, and to attempt to alleviate social problems which native persons fear would result from the mining development and growth in nearby towns.

In response to these concerns and at the specific requests of the Osnaburgh Band, Grand Council Treaty #9 and the UMEX Corporation, the Pickle Lake Manpower Committee was formed. Chaired by the Provincial Government, it is composed of representatives of the Federal and Provincial Governments, members of the local community and the UMEX Corporation. The major purpose of the Committee was to discuss the problems noted above and attempt to work out solutions that would be beneficial to both the company and the native persons. The Committee held its inaugural meeting on August 6, 1975, and has met four times since then.

At this time a draft review of the Committee's work has been prepared and will be circulated. Some of the successes worth noting are as follows:

- A new determination on the part of the local parties most directly involved to discuss problems together without relying on government acting as an intermediary. The Committee provided the means for the parties to take the initial steps necessary to reach the present stage of direct dialogue.
- Development of mining training programs. The basic purpose of these programs is to help create a labour pool in the Pickle Lake area for the expanding industrial activity. To date, over 300 information requests about specific components of the plans have been received from colleges,

universities, government bodies, private industry and a few Indian Bands across Canada. Some components of the training programs have been used extensively in a number of programs in Ontario's Colleges of Applied Arts and Technology. Components of the training programs should be useful to other provinces and territories seeking industrial development in the North.

- Application of approach to other resource development projects in remote areas. The development of the approach and the interest in the programs stemming from it would appear to indicate its extension to similar types of projects involved with both integrating native persons into the labour force and ensuring the maintenance of their life style.

- 4. Northwestern Ontario Manpower Adjustment Study - A Northwestern Ontario Manpower Adjustment Study was initiated by the Ministry's Research Branch in April, 1975. The Study is funded through the Regional Priority Budget under the Canada-Interim Northlands Subsidiary Agreement. The purpose of the Study is to examine present and anticipated imbalances between labour supply and demand in Northwestern Ontario and to explore various problems related to labour market adjustment such as labour turnover and out-migration. This project consists of the following ten component studies:

- i) An Economic History of Northwestern Ontario.
- ii) Projections of Labour Supply by Occupation in Northwestern Ontario, to 1981.
- iii) Projections of Enrolment and Graduations from Secondary and Post-Secondary Institutions in Northwestern Ontario, to 1981.

- iv) Labour Market Intentions of Graduating Students from Post-Secondary Institutions in Northwestern Ontario.
- v) Projections of Total Labour Force in Northwestern Ontario, to 1981.
- vi) Results of a Manpower Survey of the Mineral and Forest Products Industries in Northwestern Ontario.
- vii) Projections of Manpower Requirements by Occupations and Industry for Northwestern Ontario, to 1981.
- viii) Aspects of Migration in Northwestern Ontario, 1966-71.
- ix) Why People Move from Northwestern Ontario.
- x) Labour Turnover and Absenteeism in Selected Industries in Northwestern Ontario and Ontario.

These studies will be available in 1978.



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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY

NATIONAL & PROVINCIAL PARKS

ASSOCIATION OF CANADA



PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



Ontario

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

NATIONAL & PROVINCIAL PARKS
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PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

ROYAL COMMISSION
ON THE NORTHERN
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National and
Provincial Parks
Association of
Canada

L'association
des parcs nationaux
et provinciaux du
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Toronto, Ontario
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Phone (416) 366 3494



STATEMENT TO THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

December 15, 1977

The National and Provincial Parks Association of Canada (NPPAC) is a non-profit, public interest group representing some 2,000 members from across the country. The Association was incorporated under federal charter in 1963 with the broad goal of promoting the establishment and wise management of national and provincial parks in Canada.

The Association's central function is to research and give facts about parks in order that an informed public be given an opportunity to participate in the decision making processes that affect our park lands. We believe that parks are primarily for the preservation of nature and for the inspiration and re-creation of people and that, accordingly, the preservation of our Canadian natural heritage should be regarded as a priority - not as an after-thought.

It is from this perspective that the NPPAC strongly endorses the establishment of the Royal Commission on the Northern Environment and urges the Commission to carefully consider the value of park lands and nature preserves in planning the future development of northern Ontario. Mr. David Bates from Thunder Bay presented a brief to the Commission on behalf of the NPPAC and the Coalition for Wilderness. In that brief, the value of wilderness protection as a valid and important land-use option for northern Ontario was emphasized and it was strongly recommended to the Commission that regions of particular ecological significance north of 50° be identified and set aside as soon as possible before other land use activities seriously and irreversibly compromise the wilderness characteristics of these areas.

At present there are 5 provincial parks north of 50° and 7 provincial park reserves. The NPPAC feels that there is a great need to move quickly on the plans of the Ministry of Natural Resources to establish several more parks north of 50° and that citizens in both northern and southern Ontario should be given an opportunity to participate fully in the planning of such parks.

One area of particular interest to the NPPAC is the preservation of wild rivers. An increasing number of Ontario's rivers are being diverted and dammed for the generation of

hydro electric power. Before such developments take place, other land-use options, including preservation, must be carefully considered. Wild rivers have a very special : recreational, aesthetic and ecological value and it is essential that some of northern Ontario's rivers be preserved for the enjoyment and education of present and future generations of Canadians.

It should also be noted that not all park lands or reserves in northern Ontario need be of the strictly "wilderness" type. Areas that have been noticeably modified by human activity should also be considered for park land as such areas can have a high recreational and educational value.

The NPPAC urges the Royal Commission to take a comprehensive approach to the question of development in northern Ontario, to involve all Ontario residents in this process, and to carefully evaluate the needs and interests of present and future generations. The NPPAC is particularly anxious that the Commission seriously consider the question of preservation and that preservation be viewed as a legitimate and necessary land-use option in northern Ontario. The Association is looking forward to future participation in the Royal Commission.

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BY

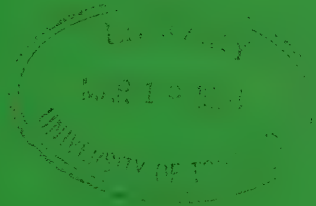
ONTARIO WELFARE COUNCIL

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

ONTARIO WELFARE COUNCIL
1240 BAY STREET
TORONTO, ONTARIO
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PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

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MANULIFE CENTRE
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TORONTO, ONTARIO
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SUBMISSION EXHIBIT NO. 217

NOTE:

ATTACHED TO THIS SUBMISSION
WERE THE FOLLOWING BOOKLETS:

- 1) "SOCIAL SERVICES IN ONTARIO"
BY THE ONTARIO WELFARE
COUNCIL,
- 2) "ANNUAL REPORT 1976-77" BY
THE ONTARIO WELFARE COUNCIL,
- 3) "FACULTY OF ENVIRONMENTAL
STUDIES" BY THE UNIVERSITY
OF WATERLOO.

THESE BOOKLETS CAN BE VIEWED
AT THE COMMISSION OFFICES,
55 BLOOR STREET WEST, SUITE
801, TORONTO, ONTARIO.

No. 277

Royal Commission on the
Northern Environment

This exhibit is produced by

Ontario Welfare Council

this 16 day of Dec 1977

Agreement

ASPECTS OF
NORTHERN HOUSING
POLICY IN ONTARIO



Ontario Welfare Council

1240 BAY STREET • TORONTO • ONTARIO • M5R 2A7

(416) 961-4771

INTRODUCTION

This paper is concerned primarily with the housing problems of smaller communities in northern Ontario. The large urban centres in the north have housing markets and housing problems that are similar to those of large urban centres elsewhere in the province. The very isolated communities, accessible only by air or water, have their own quite unique circumstances.

These communities range in population from a few hundred to fifteen thousand and include everything from cities to small communities in unorganized territory. Their economic base is primarily made up of mining, pulp and paper, lumber, tourism, transportation, and government services. Together these communities contain roughly two percent of Ontario's population.

Like most communities dependent on one or two industries, their local economies are volatile, with periods of boom, stagnation, or even outright decline. Residential construction reflects this pattern with very few communities having any steady flow of building.

This paper will include a review of the performance of existing government housing programs in these communities and will suggest new general approaches as well. It will look at the relationship between housing and the rest of the local economy. A series of recommendations will be made on various aspects of the housing process —land, financing, construction and the delivery of housing programs.

This paper will be widely distributed and used as the basis of a formal presentation to the provincial government. We trust that it will serve to illuminate some of northern Ontario's problems and that it will help lead to their solution.

The Ontario Welfare Council would like to thank the Laidlaw Foundation for its support of the Council's housing program in 1974, when work on this paper was begun.

SUMMARY OF RECOMMENDATIONS

1. There should be a "mini" Ontario Housing Action Program (OHAP) in northern Ontario for those small communities that are entering a period of boom. Dryden, for example, expects a population growth of over 50 per cent in the next few years. Such an approach should offer the same incentives as the regular OHAP program does in southern Ontario in the areas of servicing, investment, special housing investment, speeded-up subdivision approvals, and tax stabilization grants to municipalities. It should also offer fast action on some of the special northern housing conditions outlined above. For example, there should be faster action on the transfer of crown lands and a special review of servicing standards applied in the north with an eye to reducing costs and increasing speed. Any such OHAP north program should be delivered jointly by the Ministry of Housing, the Ministry of the Environment (servicing) and the Ministry of Natural Resources (crown lands). Without a full interministerial co-operation the whole approach will not work effectively.

Since the communities we are discussing are quite small, there should be provision in this program to allow the municipality to hire the staff necessary for it to implement the program.

Overcoming the shortage of serviced land is perhaps the most fundamental housing need of the north.

2. Money should be available to finance experiments in new servicing approaches devised to overcome northern conditions.
3. Crown lands in and around existing squatter communities should be leased or sold to these communities for the creation of regular town sites.
4. New rules should be instituted to make sure that all mining claims adjacent to town sites are reviewed with the needs of that community in mind.
5. The Province should strongly encourage the further development of local financial institutions such as credit unions. Specifically, a program of support for these institutions should be added to the work of the Northern Ontario Development Corporation (NODC). Part of this support should be equity participation on the part of the NODC.
6. A special effort should be made both to inform these communities of the options now available for the financing of residential development and

rehabilitation and to help them take full advantage of them. Material on all these programs should be available in one regularly up-dated source book. Staffing should be available perhaps through the NODC or some other northern development agency to help northern communities exploit these programs. Accessibility to government programs would be improved by regular travel through the north by the appropriate officers.

7. A strong effort must be made to achieve a relatively steady rate of residential construction in these communities. A local government sponsored housing company, building up local skills and responding to local needs would be the most appropriate vehicle. Such a company, whether solely local, provincial, or some combination of these, would permit these communities to hire someone, not only to promote local construction and rehabilitation, but also to take full advantage of appropriate programs offered by the senior levels of government.

In addition to supplying housing, such an approach would have the greatest possible impact in terms of upgrading local skills, and attracting and keeping tradesmen in small communities. With a flexible approach to development, it would be able to provide a mix of rental and purchase housing in tune with local needs. In this fashion problems in housing, and in the local economy more generally, could be attacked quite directly by local government or by a more broadly based local company rather than by depending on far away programs generally designed to meet problems in areas far from northern Ontario. The development of local housing policies by northern communities is a necessary first step for this sort of approach.

8. There should be a full review of building standards in relation to northern Ontario with a view to permitting the maximum possible use of less expensive local materials.

This review should be conducted with the full participation of the Central Mortgage and Housing Corporation, northern builders, northern financial institutions, local governments, northern non-profit housing groups along with the Ontario Housing Corporation and the Ministry of Housing.

9. Building co-operatives which meet the housing problems of various groups in the northern society should be strongly encouraged, particularly in a situation where participation in the building would upgrade local

skills. The Ministry of Housing should hire and train northerners who would then be made available to building co-ops as a general manager, foreman, or consultant—in whatever role they are needed.

10. There is a clear need to upgrade the management of OHC's stock of family, rent-gearred-to-income housing in these communities. Stronger guidelines are required and most importantly, better supervision of their implementation, particularly in relation to tenant selection.
11. The problem that OHC has in acquiring appropriate sites for rent-gearred-to-income family housing will not be overcome until the problem of a general shortage of serviced land is overcome. The two problems should be dealt with concurrently. There are not enough sites to meet current requests from many northern municipalities, let alone new requests.
12. The problems that OHC has in acquiring appropriate sites for rent-gearred-to-income senior citizen housing will not be overcome until the problem of a general shortage of serviced land is overcome. The two problems should be dealt with concurrently.
13. The process by which OHC and the unorganized communities decide on whether or not the Northern Ontario Assisted Housing Program (NOAH) is appropriate and if it is, how much should be built, needs to be greatly improved. We recommend spending more time in each place and involving those with a broad understanding of the values and conditions in these communities at an early stage.
14. The management of NOAH projects, particularly tenant selection, needs improvement and this should involve both stronger guidelines for local managers and better supervision.
15. The whole basis on which the Ontario Home Renewal Program is operated should be revised to make it useful in northern Ontario. It should be possible to offer assistance in areas where there are mining claims or which are crown lands. The amount of money offered by the Ministry of Housing to smaller northern communities should be related to the extent of their housing quality problems and not to their population size. The current approach is not at all sensitive to local needs.

A steady flow of housing rehabilitation work along with new residential construction would help upgrade local skills and keep a range of skilled tradesmen in far more small northern communities.

16. There should be a greatly reduced provincial review period for subdivision and official plan approvals, particularly for communities facing or experiencing a period of rapid growth. Preferably this should be done in conjunction with the OHAP North approach that we have already recommended.
17. There is a great need not only for more servicing investment in northern communities but for financial arrangements that are more favourable to them. A large part of this should take place within the context of the general housing action approach that we proposed in recommendations 1. and 7. above.
18. CMHC should review its payout system on loans to the non-profit co-operative sector and the federal and provincial governments should work together with sponsors in this sector to take further steps towards overcoming problems of finding adequate interim financing.
19. A special start-up grant should be made available to smaller local governments that wish to create a local housing company. This would encourage a serious consideration by them of this approach and also overcome the very real financial constraints faced by these communities. Grants should be related to the size of the community and the size of the program they envisage but should not be less than \$25,000. Enabling these communities to hire such a staff would also make the implementation of municipal land development programs, the Ontario Home Renewal Program, or a general housing action program far more feasible.

This sort of approach should also be developed in the context of general local housing policy.
20. The federal and provincial governments should ensure that adequate capital funds are available to allow northern municipalities to play a strong role in the development of residential lands.

Once again this role should be undertaken in the context of a local housing policy.
21. We believe that the emergency repair type of approach to poor northern housing could usefully be applied more broadly. There should be a grant program to improve the worst of northern housing while we await an increase

in the available supply of housing adequate enough to allow us to demolish shacks.

22. We believe that a broad use of the new rural and native housing program available under Section 40 of the National Housing Act would be of great value in northern Ontario. We recommend that the government of Ontario enter into an agreement with the federal government to implement this program on a broad basis as soon as possible.
 23. The Assisted Home Ownership Program should have its price guidelines for northern Ontario revised to reflect current new house prices. Loans under this program should once again be available for the purchase of existing housing, particularly in areas where there is little new residential construction.
 24. The home improvement loans that are insured under the National Housing Act should be supplemented by interest rate subsidies for low income borrowers. As it is the only improvement program available to those without clear land titles, it might well generate a great deal of home improvement work in the unorganized communities.
 25. There are quite a few northern communities with adjacent or nearby shacktowns in organized territory. There should be more projects similar to that in Brunetville/Kapuskasing to improve these unorganized communities to the point where they can be incorporated into nearby municipalities.
- Federal-provincial-municipal-unorganized community partnerships should be created for this purpose.

A CONTEXT FOR HOUSING POLICY IN NORTHERN COMMUNITIES

Housing is, of course, an integral part of the economy, and cannot be treated adequately, either at a national or provincial level or at a local level, without some examination of the relationship between local housing economies and these local economies more generally.

Aspects of the Nature of the Local Economies

Perhaps the most important characteristic of the economies of a great many of these communities is the boom-bust phenomenon. A new mine or mill may double or triple a town's population. The closing of one has resulted in some places losing people.

By and large the north has been doing well economically in the last couple of years and large parts of the north-west are in the midst of a full fledged boom.

However, because of the lack of housing and the great difficulty of achieving a boom in residential construction to match a boom in job growth, there are towns faced with growth when every house and shack in the area is occupied including the condemned ones. One response to this has been for companies to build a number of new homes which they reserve for their own workers. This does not generally overcome the total occupancy problem of these communities. In fact, in some of the smaller places, ministries of the provincial government have had to build special housing for their own employees in order to house them at all.

There are mills and factories whose high turn-over is in large measure attributable to a total absence of vacant family housing. It is even argued that several major developments may be postponed at least in part because there is not only nowhere for the permanent work force to live, there is nowhere for construction workers either.

On top of this most of the smaller communities do not have any general contractors and even the larger ones may only have one or two. Many have few tradesmen and some trades may not be represented at all. All this makes it quite difficult to get housing built at all, let alone built on a regular basis.

Most of these communities have a high percentage of unskilled workers.

Local Housing Economies

It is within this general setting that we should look at the more specific problems and characteristics of the housing economy of smaller northern communities.

There is very little serviced land. The cost of servicing land in a region of rock and swamp is very high and we have not yet developed an approach to servicing which is specially adapted to these conditions.

The methods used are essentially the same as those used in southern Ontario and the standards currently in force reinforce this situation. The need for serviced land is perhaps the most widespread and fundamental problem.

In addition to the absence of contractors and skilled building tradesmen, there are severe problems associated with the cost and supply of building materials. The use of indigenous materials is generally ruled out by requirements that materials be government inspected and approved.

With no serviced land and no residential construction industry to speak of, small communities have not been able to respond to job growth adequately. From Thunder Bay to the Manitoba border there is hardly a community with any vacancy rate at all, in either rental housing or housing for sale.

The Potential Contribution of Housing Production to Local Economies

It seems to us that if it were possible to create a situation in which as many of these communities as possible would have a steady flow of residential construction there would be substantial benefits. Communities would be able to attract and keep a wider range of tradesmen. It would be easier to develop skills among the most unskilled parts of the workforce. It would be easier to respond to rapid growth by increasing residential construction. Some of the worst housing could finally be abandoned and demolished. The whole system of supplying building materials would also be improved.

With this in mind we now turn to our specific recommendations.

THE PROBLEMS AND RECOMMENDATIONS

In this section our comments will be organized on the basis of the major elements of the housing process. Later we will be covering existing programs.

LAND AND SERVICING

Problems

- (i) Of course the greatest problem at the moment is that little or no available serviced land is the rule rather than the exception for communities in northern Ontario.
- (ii) Small municipalities with weak tax bases find it extremely onerous if not impossible to finance large servicing schemes themselves, given the current structure of assistance from the senior levels of government. This is particularly true if they expect to have trouble attracting residential construction, for then some very expensive services will be sitting in the ground, not being balanced by any increase in municipal tax revenues.
- (iii) Over much of the terrain in northern Ontario it is extremely difficult to build services.
- (iv) The process by which official plans and plans of subdivisions are reviewed and approved takes a great deal of time.
- (v) The process by which crown land is made available for private ownership takes a very long time. In fact, we have been told of waiting periods as long as four years.
- (vi) A great deal of land is under Ministerial zoning orders which does stop random severancing and building of septic tanks in inappropriate locations. On the other hand, it is just one more factor that has helped to tighten up local housing markets.
- (vii) There is widespread squatting on crown lands. In the absence of clear private land titles, it is impossible to get most kinds of private and public financing for house building, or even house rehabilitation.
- (viii) A great deal of the land in northern Ontario is under mining claims. Those who build or buy houses on these lands generally hold leases from the owner of the mining claim. In this situation also it is almost impossible to get financing. Some communities have their town sites entirely

(viii) continued

surrounded by mining claims. It was suggested to us that some claims are in fact being held primarily in order to lease parts of them for cottage and residential purposes.

Recommendations

1. There should be a "mini" Ontario Housing Action Program (OHAP) in northern Ontario for those small communities that are entering a period of boom. Dryden, for example, expects a population growth of over 50 per cent in the next few years. Such an approach should offer the same incentives as the regular OHAP program does in southern Ontario in the areas of servicing, investment, special housing investment, speeded-up subdivision approvals, and tax stabilization grants to municipalities. It should also offer fast action on some of the special northern housing conditions outlined above. For example, there should be faster action on the transfer of crown lands and a special review of servicing standards applied in the north with an eye to reducing costs and increasing speed. Any such OHAP north program should be delivered jointly by the Ministry of Housing, the Ministry of the Environment (servicing) and the Ministry of Natural Resources (crown lands). Without a full interministerial co-operation the whole approach will not work effectively.

Since the communities we are discussing are quite small, there should be provision in this program to allow the municipality to hire the staff necessary for it to implement the program.

Overcoming the shortage of serviced land is perhaps the most fundamental housing need of the north.

2. Money should be available to finance experiments in new servicing approaches devised to overcome northern conditions.
3. Crown lands in and around existing squatter communities should be leased or sold to these communities for the creation of regular town sites.
4. New rules should be instituted to make sure that all mining claims adjacent to town sites are reviewed with the needs of that community in mind.

FINANCING DEVELOPMENT

Problems

- (i) Many of these small municipalities have a poor financial position.
- (ii) There are few financial institutions in many northern communities.
- (iii) The offices of government housing agencies located as they are in the major cities of the North, are often a long way from the communities we are concerned about.

Recommendations

- 5. The Province should strongly encourage the further development of local financial institutions such as credit unions. Specifically, a program of support for these institutions should be added to the work of the Northern Ontario Development Corporation (NODC). Part of this support should be equity participation on the part of the NODC.
- 6. A special effort should be made both to inform these communities of the options now available for the financing of residential development and rehabilitation and to help them take full advantage of them. Material on all these programs should be available in one regularly up-dated source book. Staffing should be available perhaps through the NODC or some other northern development agency to help northern communities exploit these programs. Accessibility to government programs would be improved by regular travel through the north by the appropriate officers.

RESIDENTIAL CONSTRUCTION

Problems

- (i) There are few general contractors, and small communities have none. In fact they may have also few sub-contractors or tradesmen and in smaller communities, some trades may not be represented at all.
- (ii) There is little or no building on spec in these communities.
- (iii) Many building standards are inappropriate to these areas and the use of national standards virtually rules out the use of many indigenous materials.

- (iv) Some government inspectorates have huge territories to cover and end up doing their work on a sporadic basis. Visits are not regular and often are not for a long enough time.

Recommendations

7. A strong effort must be made to achieve a relatively steady rate of residential construction in these communities. A local government sponsored housing company, building up local skills and responding to local needs, would be the most appropriate vehicle. Such a company, whether solely local, provincial, or some combination of these, would permit these communities to hire someone, not only to promote local construction and rehabilitation, but also to take full advantage of appropriate programs offered by the senior levels of government.

In addition to supplying housing, such an approach would have the greatest possible impact in terms of upgrading local skills, and attracting and keeping tradesmen in small communities. With a flexible approach to development, it would be able to provide a mix of rental and purchase housing in tune with local needs. In this fashion problems in housing, and in the local economy more generally, could be attacked quite directly by local government or by a more broadly based local company rather than by depending on far away programs generally designed to meet problems in areas far from northern Ontario.

The development of local housing policies by northern communities is a necessary first step for this sort of approach.

8. There should be a full review of building standards in relation to northern Ontario with a view to permitting the maximum possible use of less expensive local materials.

This review should be conducted with the full participation of the Central Mortgage and Housing Corporation, northern builders, northern financial institutions, local governments, northern non-profit housing groups along with the Ontario Housing Corporation and the Ministry of Housing.

9. Building co-operatives which meet the housing problems of various groups in the northern society should be strongly encouraged, particularly in a situation where participation in the building would upgrade local

skills. The Ministry of Housing should hire and train northerners who would then be made available to building co-ops as a general manager, foreman, or consultant —in whatever role they are needed.

THE CURRENT PROGRAMS AND RECOMMENDATIONS

Ontario Housing Corporation Rent-Geared-to-Income Family Housing

Commentary

- (i) Most municipalities do have at least some OHC family housing and the quality of this housing is generally thought to be high.
- (ii) We have found widespread dissatisfaction with the tenant selection process. Charges have been made of racial discrimination, creaming, favouritism, and the continued use of a quota system for social assistance families. This situation is generally described as improving though.
- (iii) There is a general problem in finding appropriately serviced sites on which to build projects to meet outstanding requests from municipalities, let alone to meet new requests, particularly in the north-west.

Recommendations

- 10. There is a clear need to upgrade the management of OHC's stock of family, rent-geared-to-income housing in these communities. Stronger guidelines are required and most importantly, better supervision of their implementation, particularly in relation to tenant selection.
- 11. The problem that OHC has in acquiring appropriate sites for rent-geared-to-income family housing will not be overcome until the problem of a general shortage of serviced land is overcome. The two problems should be dealt with concurrently.

Ontario Housing Corporation Rent-Geared-to-Income Senior Citizen Housing

Commentary

- (i) This program has been used almost everywhere except in the unorganized communities and is well liked.

- (ii) There are lots of outstanding requests but the problem once again is finding serviced sites, particularly in the north-west.

Recommendation

12. The problems that OHC has in acquiring appropriate sites for rent-geared-to-income senior citizen housing will not be overcome until the problem of a general shortage of serviced land is overcome. The two problems should be dealt with concurrently.

Northern Ontario Assisted Housing (NOAH)

Commentary

- (i) This program provides rent-geared-to-income housing in unorganized communities.
- (ii) A great many of the projects that have been undertaken so far have taken a very long time to complete. In fact most are still incomplete. The main supplier of the prefabricated houses used went bankrupt. Similar comments were made on the management of those that have been completed as were made on the regular OHC family housing.
- (iii) The meetings convened by OHC to explain this program in small unorganized communities were generally inappropriate. They were one-shot efforts and primarily technical and expository in nature. They left a good deal of confusion over the program's nature and about who would be getting this new housing.
- (iv) The foregoing are primarily delivery problems. The goal of getting new rent-geared-to-income housing in these communities was generally seen as a good one.

Recommendation

13. The process by which OHC and the unorganized communities decide on whether or not the Northern Ontario Assisted Housing Program is appropriate and if it is, how much should be built, needs to be greatly improved. We recommend spending more time in each place and involving those with a broad understanding of the values and conditions in these communities at an early stage.

14. The management of these projects, particularly tenant selection, needs improvement and this should involve both stronger guidelines for local managers and better supervision.

Ontario Home Renewal Program (OHRP)

Commentary

- (i) This program, which offers loans and grants to homeowners wanting to rehabilitate their homes, cannot be used when there is no clear title to the land involved. Therefore they cannot be given in mining claim areas or on crown lands thus ruling out most of the unorganized and more isolated parts of the north.
- (ii) The program is administered by municipalities who receive funds to loan and grant in relation to the size of their community. Small municipalities thus receive a very small sum of money and one which is in no way related to the extent of housing quality problems in their communities. This, combined with a cumbersome set of administrative guidelines and procedures, make this program marginal at best for small northern municipalities.

Recommendation

15. The whole basis on which the Ontario Home Renewal Program is operated should be revised to make it useful in northern Ontario. It should be possible to offer assistance in areas where there are mining claims or which are crown lands. The amount of money offered by the Ministry of Housing to smaller northern communities should be related to the extent of their housing quality problems and not to their population size. The current approach is not at all sensitive to local needs.

A steady flow of housing rehabilitation work along with new residential construction would help upgrade local skills and keep a range of skilled tradesmen in far more small northern communities.

Official Plans and Plans of Subdivision Supervision
by the Ministry of Housing

Commentary

The widespread use of Ministerial zoning orders and the lengthy process of approving plans of subdivision, and official plans contribute a great deal to the problems of small towns in getting housing built in boom times.

Recommendation

16. There should be a greatly reduced provincial review period for these approvals, particularly for communities facing or experiencing a period of rapid growth. Preferably this should be done in conjunction with the OHAP North approach that we have already recommended.

Servicing Investment

Commentary

Subdivisions cannot be built without services which in the north are very expensive and beyond the reach of small, and often fiscally weak, municipalities. The Ministry of the Environment does not appear to be in any great hurry even in towns with boom conditions.

Recommendation

17. There is a great need not only for more servicing investment in northern communities but for financial arrangements that are more favourable to them. A large part of this should take place within the context of the general housing action approach that we proposed in recommendations 1. and 7. above.

Non-Profit and Co-Operative Housing

Commentary

- (i) In this sector, in common with all others, builders are having difficulty in finding serviced land.
- (ii) Another major problem is that of interim financing. Because CMHC does not pay out moneys on its loans until work has been completed and

because there is an overall hold-back until the project is completely finished, anyone developing housing in this manner must either have a fair amount of cash of their own or a line of credit at a financial institution. Groups in the north-west, for example, find it difficult if not impossible to obtain either one.

- (iii) Several of the non-profit groups in the North have been self-help groups. Among the advantages of this approach are the chance to use sweat equity and the parallel opportunity to improve the construction skills of those involved. The few groups that have completed projects have already had previously unskilled labourers acquire tradesmen's papers as a result of their projects.
- (iv) The new Ministry of Housing program in this area --the Community Sponsored Housing Branch, where it is known--has been received very well and it is expected to make a great deal of difference to the sector. Some municipalities have also expressed an interest in exploring its possibilities.

Recommendations

- 18. CMHC should review its payout system on loans to the non-profit co-operative sector and the federal and provincial governments should work together with sponsors in this sector to take further steps towards overcoming problems of finding adequate interim financing.
- 19. A special start-up grant should be made available to smaller local governments that wish to create a local housing company. This would encourage a serious consideration by them of this approach and also overcome the very real financial constraints faced by these communities. Grants should be related to the size of the community and the size of the program they envisage but should not be less than \$25,000. Enabling these communities to hire such a staff would also make the implementation of municipal land development programs, the Ontario Home Renewal Program, or a general housing action program far more feasible.

This sort of approach should also be developed in the context of general local housing policy.

Land Assembly and Development

Commentary

In the northwest, municipal governments are the major if not the only subdividers in many of the smaller communities. All whom we spoke with were interested in gaining access to federal land assembly funds. Kenora, for example, which had several federal-provincial land assemblies completed in the 1950s has now run through this inventory. Land development is one of the crucial problems of the north.

Recommendation

20. The federal and provincial governments should ensure that adequate capital funds are available to allow northern municipalities to play a strong role in the development of residential lands.

Once again this role should be undertaken in the context of a local housing policy.

Emergency Repairs and Winter Warmth

Commentary

This CMHC program has for several years provided cash to native organizations to make substandard houses a little more liveable. Although obviously a band-aid program, it has provided an entry into the housing field for these organizations, giving them funds to hire staff and a chance to acquire some skills. CMHC are now funding a full fledged housing development group for the Ontario Metis and Non Status Indians Association (OMNSIA). On the other hand, the guideline of \$500 per house currently in use is widely viewed as being too low.

Recommendation

21. We believe that the emergency repair type of approach to poor northern housing could usefully be applied more broadly. There should be a grant program to improve the worst of northern housing while we await an increase in the available supply of housing adequate enough to allow us to abolish shacks.

Section 40, National Housing Act,
the Rural and Native Housing Program

Commentary

This CMHC program, which will offer purchase geared-to-income in rural areas, is dependent on provincial participation. At this point no federal-provincial agreement has been signed for Ontario. The provincial government apparently wants to proceed very cautiously, starting with only three pilot projects for this year, if any agreement is signed at all. There is some reluctance, we understand, to adopt a purchase geared-to-income approach.

Recommendation

22. We believe that a broad use of the new rural and native housing program available under Section 40 of the National Housing Act would be of great value in northern Ontario. We recommend that the government of Ontario enter into an agreement with the federal government to implement this program on a broad basis as soon as possible.

The Assisted Home Ownership Program

Commentary

- (i) In north-western Ontario, for example, this CMHC program barely works at all. The assistance is only available to help buy new houses and there is not much new house construction going on. What is being built is generally priced above the program's guidelines.
- (ii) The program is administered by CMHC in northern offices which are in Sudbury, Thunder Bay, North Bay and Sault Ste. Marie. Access to the program is difficult outside of these centres.

Recommendation

23. The Assisted Home Ownership Program should have its price guidelines for northern Ontario revised to reflect current new house prices. Loans under this program should once again be available for the purchase of existing housing, particularly in areas where there is little new residential construction.

Home Improvement Loans

Commentary

These loans, given by approved lenders and insured under the National Housing Act, are used in unorganized communities because they are not restricted to properties with clear land title. It is one of the few government housing programs that is this flexible.

Recommendation

24. The home improvement loans that are insured under the National Housing Act should be supplemented by interest rate subsidies for low income borrowers. As it is the only improvement program available to those without clear land titles, it might well generate a great deal of home improvement work in the unorganized communities.

The Brunetville/Kapuskasing Experiment

Commentary

In the 1960s the federal and provincial governments entered into a partnership to improve an unorganized community and part shacktown next to Kapuskasing into a fully serviced community with decent housing and clear land titles. It was called Brunetville. At the end of the process it was annexed by the Town of Kapuskasing and received full municipal services from them. As far as we know this experiment was quite successful. It has not, however, ever been repeated.

Recommendation

25. There are quite a few northern communities with adjacent or nearby shacktowns in organized territory. There should be more projects similar to that in Brunetville/Kapuskasing to improve these unorganized communities to the point where they can be incorporated into nearby municipalities.

Federal-provincial-municipal unorganized community partnerships should be created for this purpose.

TDB/h1
April 1975

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT
BY
CONTINENTAL HYDROPONICS LIMITED

PRESENTED AT
TORONTO, ONTARIO
ON
DECEMBER 16, 1977



ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

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PRESENTED AT

TORONTO, ONTARIO
ON
DECEMBER 16, 1977

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TORONTO, ONTARIO
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SUBMISSION EXHIBIT NO. 218

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DECEMBER 16, 1977

No. 218

Royal Commission on the
Northern Environment

This exhibit is produced by

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this 16 day of Dec 1977

Sgt. J. J. J.

P R E S E N T A T I O N T O :

T H E R O Y A L C O M M I S S I O N

O N

T H E N O R T H E R N E N V I R O N M E N T

P R E S E N T E D B Y :

C O N T I N E N T A L H Y D R O P O N I C L T D .

S U B J E C T :

H O R T I C U L T U R E , N O R T H O F 50



CONTINENTAL Hydroponics Limited

December 16, 1977

Presentation To: The Royal Commission on the Northern Environment

Presented By: Continental Hydroponics Ltd. Downsview, Ontario

Per: Gerald Rosenberg, President.

(Address on bottom of page)

Subject: HORTICULTURE, NORTH OF 50.

With a scarcity of arable land plus an extremely short growing season, one concludes that agriculture, and more specifically the growing of fresh fruit and vegetables poses a serious problem for the North. Dependence on the south for the importation of such foods cannot be taken for granted ... not at the present time and certainly not in the very near future.

Scientists predict that within the next five to ten years, a food crisis of unprecedented proportions could overtake every nation in the world ... including Canada and the United States!

Today, however, we know that even that very startling and worrisome pronouncement is "stale-dated." For example: Many California farmers went bankrupt this year because of drought. Many Florida farmers did not plant vegetables this year because of early frost conditions last year. This can only contribute to shortages and excessively high costs of available produce.

In order to ensure a good supply of fresh vegetables

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nutritious and low in cost, a new concept in horticulture had to be investigated and researched. We, at Continental Hydroponics Ltd. have developed just such a system! Using lightweight, yet extremely durable PVC, we can set up a completely operational hydroponic system anywhere in the North.

Our METROPONICTM hydroponic system uses little water and very little energy. Moreover the nutrient solution is recyclable. With our system of METROPONICTM horticulture, Northerners could grow abundant and nutritious fruit and vegetables all year 'round, recycling the nutrient solution every three weeks by draining it into tanks for the purpose of Aquaculture - i.e. the raising of fish. The nutrient solution feeds the fish giving certain species a 30% faster growth than in water. The same nutrient solution can then be recycled back into the farm system after having been enriched by nature's own fertilizer - fish droppings. We then have a continuous cycle of raising fish and producing nutritious vegetables at a low cost.

Some very important side effects to our METROPONICTM system for the people of the North are:

1. Job Creation
2. Therapeutic and Recreational Benefits
3. Joy of seeing greenery all year 'round in the North

In order that our system will operate at peak efficiency in the North, we intend to research and develop a new type of greenhouse especially adapted to the extreme weather conditions prevailing in the North. As one of our projects, we are now in the process of applying for a grant from the Federal Ministry of Industry, Trade and Commerce under the ENTERPRISE DEVELOPMENT PROGRAM for the purpose of specific greenhouse development.

We know we shall be able to develop a viable system

that could be used throughout Northern Ontario, to at first supplement the importation of fresh fruit and vegetables and eventually allow the North to become completely self-sufficient in this respect.

Regardless of the initial cost of setting up these METROPONICTM farming systems, in the long run they pay for themselves and will save each community many thousands of dollars lost to the high cost of imports.

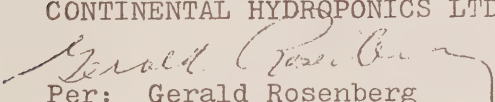
We are well aware of the high cost to Northerners of vegetables in the spring and summer ... and the almost prohibitive costs in the winter. (We are also aware of the tastlessness and lack of nutrition of these imported vegetables.) However, now with the warning that even this importation of fruit and vegetables cannot be taken for granted any longer - we must act quickly!

Time is of the essence ... and the need for an alternative food supply is imminent.

Our research tells us that our METROPONICTM hydroponic system is the most innovative and promising anywhere on the North American continent, and abroad.

We feel in all sincerity, that our METROPONICTM hydroponic system is one of the very important solutions to this problem for NORTH OF 50.

Sincerely
CONTINENTAL HYDROPONICS LTD.


Per: Gerald Rosenberg
President

Encl.

P.S. Attached is our brief "Future Farming - Today" on METROPONICS^{7A1} which was our Stage 1 - written at that time mainly for urban centres. Stage 2 - will be our concentration on Greenhouse design, which is currently in progress - making it of utmost importance to HORTICULTURE - NORTH OF 50.

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SUBMISSION TO
THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

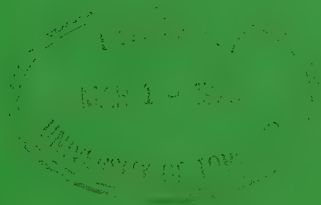
THE CONSERVATION COUNCIL
OF ONTARIO

PRESENTED AT

TORONTO, ONTARIO

ON

DECEMBER 16, 1977



Ontario

ROYAL COMMISSION
ON THE NORTHERN
ENVIRONMENT

THE HON. MR. JUSTICE
E. P. HARTT
COMMISSIONER

SUBMISSION TO

THE ROYAL COMMISSION ON
THE NORTHERN ENVIRONMENT

BY

THE CONSERVATION COUNCIL
OF ONTARIO
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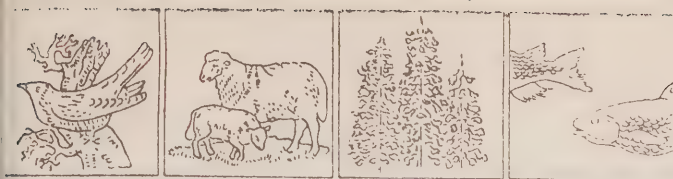
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December 16, 1977

THE CONSERVATION COUNCIL OF ONTARIO

1st Floor, 45 Charles Street East, Toronto M4Y 1S2 — Telephone: 961-6830

STATEMENT TO THE ROYAL COMMISSION ON THE NORTHERN ENVIRONMENT

The Conservation Council of Ontario brings together representatives of 38 Provincial organizations as well as selected individuals having concern for Ontario's environmental quality. Its Aims and Objects and list of members appear on the attached Directory. The Council is a non-profit, non-political, public service body with interests in the long-range quality of life in Ontario.

We are pleased that your Commission has been established and urge it to keep the broadest perspective possible when deciding on its final terms of reference. Our main concern is the environment and the wise use of resources, but we are well aware of the interrelations these matters have with social, cultural and economic factors as well as with the well-being of the residents in Northern Ontario. They must be looked at together.

A comprehensive approach to planning for the North will allow Ontarians as a whole, and indeed all Canadians, to benefit from what the North has to offer while at the same time avoiding the mistakes which have been made in the South. The well-managed coordination and regulation of both development and conservation in the North can lead to an improved quality of life there and be of assistance to the South as well. These two vastly different regions of Ontario are dependent on one another, and we hope for a productive and co-operative effort in planning how the North will be in the future.

Your decision to hold these two days of meetings here in Toronto is to be commended and we urge that during the course of your Commission's work you will schedule a number of meetings and hearings in the South.

We are concerned that this ultimate goal for the North will be breached too frequently in the interim period of the Commission's work. A suitable balance must be achieved between the short-term development priorities and the longer-term overall development plan which, we hope, will be the outcome of the Commission's deliberation. We urge the Commission to recommend in its Interim Report that the Government of Ontario exercise judicious control over isolated and piecemeal developments in the North until the Commission's final Report is tabled.

We believe that the decisions made for the area of Ontario north of 50°00' will affect and be affected by that to the south, especially the major population centres. Consequently the area of the Commission's study should be expanded to include all of the major communities of the North.

The Council is studying issues which it believes warrant further and in-depth study, and will be anxious to review the Commission's Interim Report so that these issues can be viewed in terms of the Commission's mandate. You can expect a proposal from us which will be making application for financial assistance in the preparation of a detailed submission to you.

The Council's 26-year record in promoting wise environmental management in Ontario and its ability to reflect the views of a wide cross-section of Ontario's professional, citizen, labour, educational, public interest, recreational and environmental groups are qualities which we believe speak for our genuine concern and active participation in the future work of the Commission.

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The Conservation Council of Ontario

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Membership

The Council is a non-profit, non-political, public service body. In its membership it has enrolled those major Provincial associations that have an active concern for the quality of the environment, and outstanding individuals having fundamental knowledge and experience in phases of conservation. Total membership of its constituent organizations exceeds one million persons.

The services of these people are freely given and unselfishly dedicated to the advancement and application of conservation principles.

Aims and Objects

(a) To promote the welfare of all persons by encouraging the conservation, restoration and best use of natural resources of soil and water and the life sustained thereby.

(b) To promote the co-operation of organizations engaged in various phases of conservation and related human betterment;

(c) To promote the co-ordination of the activities of conservation organizations;

(d) To provide the opportunity for representatives of environmental and conservation organizations to meet on common ground for the planning and development of conservation programmes, at both provincial and regional levels;

(e) To institute and encourage research in all phases of conservation and to stimulate public education, particularly that of the younger generation, in the conservation of natural resources.

(f) To co-operate with other organizations and governmental agencies having the conservation, restoration and development of natural resources as their objectives.

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